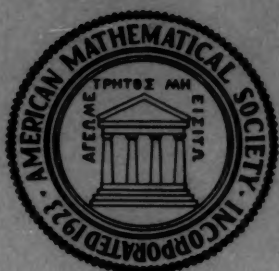


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Annual Index – 1982

Subject Index 00 – 58

Index of Mathematical Papers Volume 14

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(As used in Mathematical Reviews beginning in 1980)

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- Derman, Cyrus** See Olkin, Ingram; et al., (82c:60002)
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- Khouri, Sarkis J.** (with Parsons, Torrence D.) ★Mathematical methods in finance and economics. (82g:90001)
- Olkin, Ingram** (with Gleser, Leon Jay; Derman, Cyrus) ★Probability models and applications. (82c:60002)
- Parsons, Torrence D.** See Khouri, Sarkis J., (82g:90001)
- Pollard, J. H.** ★Numerical and statistical techniques. (82j:65031)
- Spohn, Wolfgang** Stochastic independence, causal independence, and shieldability. (82a:60007)

00A07 Problem books

- Bryński, Maciej** (with Jurkiewicz, Jerzy) ★Zbiór zadań z algebry. (Polish) [A collection of problems in algebra] 82i:00009
- (Germain, Paul)** See Obata, J., 82k:00005
- Jurkiewicz, Jerzy** See Bryński, Maciej, 82i:00009
- Obata, J.** ★Exercices et problèmes de mécanique des milieux continus. (French) [Exercises and problems in the mechanics of continuous media] 82k:00005
- Vauthier, Jacques** ★Problèmes d'analyse. (French) [Problems in analysis] 82k:00006

secondary classifications:

- Amilogova, V. A.** See Mihailenko, V. E.; et al., (82c:51004)
- Baillie, Alain** (with Van Cutsem, Bernard) ★Problèmes de probabilités et de statistiques. (French) [Problems of probability and statistics] (82g:60001)
- Dorogovcev, A. Ja.** (with Sil'vestrov, D. S.; Skorohod, A. V.; Jadrenko, M. I.) ★Теория неопределенностей. (Russian) [Theory of probability] (82a:60001)
- Feyel, Denis** (with de la Pradelle, Arnaud) ★Ejercicios sobre las funciones analíticas. (Spanish) [Exercises on analytic functions] (82m:30001)
- Frolov, S. A.** ★Сборник задач по начертательной геометрии. (Russian) [A collection of problems in descriptive geometry] (82c:51002)
- George, Claude** ★Exercices et problèmes d'intégration. (French) [Exercises and problems in integration] (82h:28001)
- Jadrenko, M. I.** See Dorogovcev, A. Ja.; et al., (82a:60001)
- Kiselev, A. I.** See Krasnov, M. L.; et al., (82g:34001)
- Kovalev, S. N.** See Mihailenko, V. E.; et al., (82c:51004)
- Krasnov, M. L.** (with Kiselev, A. I.; Makarenko, G. I.) ★A book of problems in ordinary differential equations. (82g:34001)
- Levina, Ž. G.** See Mihailenko, V. E.; et al., (82c:51004)
- Makarenko, G. I.** See Krasnov, M. L.; et al., (82g:34001)
- Malinovskaja, V. I.** See Mihailenko, V. E.; et al., (82c:51004)
- Malliavin-Brammeret, Marie-Paule** (with Warusfel, A.) ★Algèbre linéaire et géométrie classique. (French) [Linear algebra and classical geometry] (82j:15001b)
- Mihailenko, V. E.** (with Amilogova, V. A.; Kovalev, S. N.; Levina, Ž. G.; Malinovskaja, V. I.; Olešuk, T. Ju.; Panasjuk, L. S.; Puhov, I. K.; Sedleckaja, N. I.) ★Сборник задач по начертательной геометрии с элементами программирования. (Russian) [A collection of problems in descriptive geometry with elements of programming] (82c:51004)
- Olešuk, T. Ju.** See Mihailenko, V. E.; et al., (82c:51004)
- Panasjuk, L. S.** See Mihailenko, V. E.; et al., (82c:51004)
- Pólya, G.** (with Szegő, Gábor) ★Задачи и теоремы из анализа. Часть вторая. (Russian) [Problems and theorems in analysis. Part Two] (82c:26001)
- de la Pradelle, Arnaud** See Feyel, Denis, (82m:30001)
- Puhov, I. K.** See Mihailenko, V. E.; et al., (82c:51004)
- (Raikov, D. A.)** See Pólya, G.; et al., (82c:26001)
- Rešetnjak, Ju. G.** ★Сборник задач по курсу математического анализа. (Russian) [A collection of problems for a course in mathematical analysis] (82h:26002)
- (Romero Ros, Emilio)** See Feyel, Denis; et al., (82m:30001)
- Sedleckaja, N. I.** See Mihailenko, V. E.; et al., (82c:51004)
- Sil'vestrov, D. S.** See Dorogovcev, A. Ja.; et al., (82a:60001)
- Skorohod, A. V.** See Dorogovcev, A. Ja.; et al., (82a:60001)
- (Sokurov, Vladimir)** See Krasnov, M. L.; et al., (82g:34001)
- Szegő, Gábor** See Pólya, G., (82c:26001)
- Van Cutsem, Bernard** See Baillie, Alain, (82g:60001)
- Walczak, Paweł Grzegorz** (with Waliszewski, Włodzimierz) ★Geometria różniczkowa w zadaniach. (Polish) [Differential geometry in problems] (82c:53001)
- Waliszewski, Włodzimierz** See Walczak, Paweł Grzegorz, (82c:53001)
- Warusfel, A.** See Malliavin-Brammeret, Marie-Paule, (82j:15001b)
- 00A10 Collections of papers; proceedings of conferences of general interest, translation volumes, etc. [See also 01A75.]**
- (Balslev, Erik)** See Congress: Scandinavian, Mathematicians, 82i:00012
- (Beckenbach, Edwin F.)** See General inequalities, 82h:00004
- (Bourbaki, Nicolas)** See Seminar: Bourbaki, 82k:00009
- (Chatterji, S. D.)** See Yearbook: Surveys of mathematics, 82e:00012
- (Cheng, K. N.)** See Proceedings: Mathematical Seminar: Singapore 1980, 82e:00010
- (Chong, C. T.)** See Proceedings: Mathematical Seminar: Singapore 1980, 82e:00010
- (Dostal, M. A.)** See American Mathematical Society Translations, Ser. 2, 82a:00009
- (Fuchssteiner, Benno)** See Yearbook: Surveys of mathematics, 82e:00012
- (Gamkrelidze, R. V.)** See Algebra. Topology. Geometry, 82d:00002 and 82k:00007
- (Kulisch, Ulrich)** See Yearbook: Surveys of mathematics, 82e:00012
- (Laugwitz, Detlef)** See Yearbook: Surveys of mathematics, 82e:00012
- (Liedt, Roman)** See Yearbook: Surveys of mathematics, 82e:00012
- (Meek, D. S.)** See Proceedings: Manitoba Conference on Numerical Mathematics and Computing, 82j:00010 and 82j:00011
- (Nachbin, Leopoldo)** See Mathematical analysis and applications, 82i:00014
- Nižnik, L. P.** (with Romanenko, R. V.) The 12th Mathematical School. (Russian) 82a:00008

- (Orlicz, Wladyslaw) See Special issue: Orlicz, Wladyslaw, 82h:00005
- Romanenko, R. V. See Niznik, L. P. 82a:00008
- (Ščerbakov, B. A.) See Investigations in functional analysis and differential equations, 82i:00013
- (Schwartz, Laurent) See Mathematical analysis and applications, 82i:00014
- (Skorobogat'ko, V. Ja.) See Studies in the qualitative theory of differential equations and its applications, 82d:00007
- (Szűcs, J.) See American Mathematical Society Translations, Ser. 2, 82f:00004
- (Tönno, M.) See Conference: Theoretical and Applied Questions of Mathematics, 82d:00003
- (Tretkoff, Marvin D.) See American Mathematical Society Translations, Ser. 2, 82a:00009
- (Williams, H. C.) See Proceedings: Manitoba Conference on Numerical Mathematics and Computing, 82j:00010 and 82j:00011
- Aarhus ★18th Scandinavian Congress of Mathematicians. 82i:00012
- Abstracts:
Conference of the Lithuanian Mathematical Society Abstracts from the 19th Conference of the Lithuanian Mathematical Society (Kaunas, June 16–17, 1978). (Russian) 82j:00008
- Algebra, theory of numbers and their applications ★Algebra, theory of numbers and their applications. 82i:00010
- Algebra. Topology. Geometry ★Алгебра. Топология. Геометрия. Том 18. (Russian) [Algebra. Topology. Geometry. Vol. 18] 82d:00002
- ★Алгебра. Топология. Геометрия. Том 19. (Russian) [Algebra. Topology. Geometry. Vol. 19] 82k:00007
- American Mathematical Society Translations, Ser. 2 ★American Mathematical Society Translations, Ser. 2, Vol. 112. 82a:00009
- ★American Mathematical Society Translations, Ser. 2, Vol. 116. 82f:00004
- Approximation of functions by polynomials and splines ★Approximation of functions by polynomials and splines. 82e:00009
- Aspects contemporains de la science ★Aspects contemporains de la science. (French) [Contemporary aspects of science] 82k:00008
- Birthday:
Orlicz, Wladyslaw ★Special issue dedicated to Wladyslaw Orlicz on the occasion of his seventy-fifth birthday. 82h:00005
- Schwartz, Laurent ★Mathematical analysis and applications. Part A. 82i:00014a
- ★Mathematical analysis and applications. Part B. 82i:00014b
- Boundary value problems of mathematical physics ★Boundary value problems of mathematical physics. X. 82i:00011
- Brussels ★Aspects contemporains de la science. (French) [Contemporary aspects of science] 82k:00008
- Colloquium:
Contemporary Aspects of Science ★Aspects contemporains de la science. (French) [Contemporary aspects of science] 82k:00008
- Conference:
Army Mathematicians ★Transactions of the Twenty-seventh Conference of Army Mathematicians. 82k:00010
- General Inequalities ★General inequalities. 2. 82b:00004
- Lithuanian Mathematical Society Abstracts from the 19th Conference of the Lithuanian Mathematical Society (Kaunas, June 16–17, 1978). (Russian) 82j:00008
- Manitoba, Numerical Mathematics and Computing ★Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing. Vol. I. 82j:00010
- ★Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing. Vol. II. 82j:00011
- Theoretical and Applied Questions of Mathematics ★Тезисы Конференции "Теоретические и Прикладные Вопросы Математики". (Russian) [Abstracts of the Conference on Theoretical and Applied Questions of Mathematics] 82d:00003
- Congress:
Scandinavian, Mathematicians ★18th Scandinavian Congress of Mathematicians. 82i:00012
- Contemporary aspects of science ★Aspects contemporains de la science. (French) [Contemporary aspects of science] 82k:00008
- Differential equations ★Питання якісної теорії диференціальних рівнянь їх застосування. (Ukrainian) [Studies in the qualitative theory of differential equations and its applications] 82d:00007
- Dynamical systems ★American Mathematical Society Translations, Ser. 2, Vol. 116. 82f:00004
- Functional analysis ★Special issue dedicated to Wladyslaw Orlicz on the occasion of his seventy-fifth birthday. 82h:00005
- General inequalities ★General inequalities. 2. 82b:00004
- Geometry ★Алгебра. Топология. Геометрия. Том 18. (Russian) [Algebra. Topology. Geometry. Vol. 18] 82d:00002
- Hilbert's sixteenth problem ★American Mathematical Society Translations, Ser. 2, Vol. 112. 82a:00009
- Investigations in functional analysis and differential equations ★Исследования по функциональному анализу и дифференциальным уравнениям. (Russian) [Investigations in functional analysis and differential equations] 82i:00013
- Hogi Nauki i Tehniki ★Алгебра. Топология. Геометрия. Том 18. (Russian) [Algebra. Topology. Geometry. Vol. 18] 82d:00002
- ★Алгебра. Топология. Геометрия. Том 19. (Russian) [Algebra. Topology. Geometry. Vol. 19] 82k:00007
- Kaunas Abstracts from the 19th Conference of the Lithuanian Mathematical Society (Kaunas, June 16–17, 1978). (Russian) 82j:00008
- Lubbock, Tex. ★Visiting scholars' lectures—1980. 82k:00011
- Mathematical analysis and applications ★Mathematical analysis and applications. Part A. 82i:00014a
- ★Mathematical analysis and applications. Part B. 82i:00014b
- Mathematics ★Mathématiques. (French) [Mathematics] 82j:00009
- Mathématiques ★Mathématiques. (French) [Mathematics] 82j:00009
- Meeting:
Shaanxi Provincial Mathematical Society ★Proceedings of the Annual Meeting of the Shaanxi Provincial Mathematical Society. (Chinese) 82f:00005
- Zagreb-Graz Mathematicians ★II. Mathematikertreffen Zagreb-Graz. (German) [Second Zagreb-Graz Meeting of Mathematicians] 82g:00002
- Oberwolfach ★General inequalities. 2. 82b:00004
- Plitvice ★II. Mathematikertreffen Zagreb-Graz. (German) [Second Zagreb-Graz Meeting of Mathematicians] 82g:00002
- Proceedings:
Annual Meeting of the Shaanxi Provincial Mathematical Society ★Proceedings of the Annual Meeting of the Shaanxi Provincial Mathematical Society. (Chinese) 82f:00005
- Manitoba Conference on Numerical Mathematics and Computing ★Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing. Vol. I. 82j:00010
- ★Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing. Vol. II. 82j:00011
- Mathematical Seminar: Singapore 1980 ★Proceedings of the Mathematical Seminar: Singapore 1980. 82e:00010
- Seminar:
Bourbaki ★Séminaire Bourbaki. Vol. 1979/80. (French) [Bourbaki Seminar. Vol. 1979/80] 82k:00009
- Singapore, Mathematical ★Proceedings of the Mathematical Seminar: Singapore 1980. 82e:00010
- Singapore ★Proceedings of the Mathematical Seminar: Singapore 1980. 82e:00010
- Special issue:
Orlicz, Wladyslaw ★Special issue dedicated to Wladyslaw Orlicz on the occasion of his seventy-fifth birthday. 82h:00005
- Studies in the qualitative theory of differential equations and its applications ★Питання якісної теорії диференціальних рівнянь їх застосування. (Ukrainian) [Studies in the qualitative theory of differential equations and its applications] 82d:00007
- Topology ★Алгебра. Топология. Геометрия. Том 18. (Russian) [Algebra. Topology. Geometry. Vol. 18] 82d:00002
- Transactions:
Conference of Army Mathematicians ★Transactions of the Twenty-seventh Conference of Army Mathematicians. 82k:00010
- Transactions of the Moscow Mathematical Society ★Transactions of the Moscow Mathematical Society, 1981, Issue 1. 82e:00011
- ★Transactions of the Moscow Mathematical Society, 1981, Issue 2. 82m:00010
- Visiting scholars' lectures ★Visiting scholars' lectures—1980. 82k:00011
- West Point, N.Y. ★Transactions of the Twenty-seventh Conference of Army Mathematicians. 82k:00010
- Winnipeg, Man. ★Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing. Vol. I. 82j:00010
- ★Proceedings of the Tenth Manitoba Conference on Numerical Mathematics and Computing. Vol. II. 82j:00011
- Xian ★Proceedings of the Annual Meeting of the Shaanxi Provincial Mathematical Society. (Chinese) 82f:00005
- Yearbook:
Surveys of mathematics ★Jahrbuch Überblicke Mathematik 1980. (German) [Yearbook: Surveys of mathematics 1980] 82e:00012
- secondary classifications:
(Atteia, M.) See Nonlinear problems of analysis in geometry and mechanics, (82d:00005)
- (Bancel, Daniel) See Nonlinear problems of analysis in geometry and mechanics, (82d:00005)
- (Boas, R. P.) See Men'sov, D. E., (82k:42004)
- (Černavskii, A. V.) See Geometric methods in problems of algebra and analysis, (82d:00004)
- (Gavrilov, G. P.) See Enumeration problems of combinatorial analysis, (82h:05018)
- (Gödel, Kurt) See Gödel's theorem and the continuum hypothesis, (82b:03003)
- (Gumowski, L.) See Nonlinear problems of analysis in geometry and mechanics, (82d:00005)
- (Hvedelidze, B. V.) See Theory of analytic functions and harmonic analysis, (82d:00009)
- (Kolmogorov, A. N.) See Investigations in the metric theory of surfaces, (82b:53083)
- (Lourenço, Manuel) See Gödel's theorem and the continuum hypothesis, (82b:03003)
- Men'sov, D. E. Limits of indeterminacy in measure of T -means of subseries of a trigonometric series. (82k:42004)
- (Novikov, S. P.) See Investigations in the metric theory of surfaces, (82b:53083)
- (Rimrott, F. P. J.) See Theoretical and applied mechanics, (82d:00008)
- (Sabitov, I. H.) See Investigations in the metric theory of surfaces, (82b:53083)
- (Tabarok, B.) See Theoretical and applied mechanics, (82d:00008)
- (Zabreiko, P. P.) See Qualitative and approximate methods for the investigation of operator equations, (82d:00006)
- Algebra ★Геометрические методы в задачах алгебры и анализа. Вып. 2. (Russian) [Geometric methods in problems of algebra and analysis. No. 2] (82d:00004)
- Analysis ★Геометрические методы в задачах алгебры и анализа. Вып. 2. (Russian) [Geometric methods in problems of algebra and analysis. No. 2] (82d:00004)
- Analytic functions ★Теория аналитических функций и гармонический анализ. (Russian) [Theory of analytic functions and harmonic analysis] (82d:00009)
- Combinatorial analysis ★Перечислительные задачи комбинаторного анализа. (Russian) [Enumeration problems of combinatorial analysis] (82h:05018)
- Congress:
Theoretical and Applied Mechanics ★Theoretical and applied mechanics. (82d:00008)
- Continuum hypothesis ★O teorema de Gödel e a hipótese do contínuo. (Portuguese) [Gödel's theorem and the continuum hypothesis] (82b:03003)
- Enumeration problems of combinatorial analysis ★Перечислительные задачи

- комбинаторного анализа. (Russian) [Enumeration problems of combinatorial analysis] (82h:05018)
- Geometric methods in problems of algebra and analysis** ★Геометрические методы в задачах алгебры и анализа. Вып. 2. (Russian) [Geometric methods in problems of algebra and analysis. No. 2] (82d:00004)
- Geometry** ★Nonlinear problems of analysis in geometry and mechanics. (82d:00005)
- Gödel's theorem and the continuum hypothesis** ★O teorema de Gödel e a hipótese do continuo. (Portuguese) [Gödel's theorem and the continuum hypothesis] (82b:03003)
- Harmonic analysis** ★Теория аналитических функций и гармонический анализ. (Russian) [Theory of analytic functions and harmonic analysis] (82d:00009)
- Investigations in the metric theory of surfaces** ★Исследования по метрической теории поверхностей. (Russian) [Investigations in the metric theory of surfaces] (82b:53083)
- Mechanics** ★Theoretical and applied mechanics. (82d:00008)
- ★Nonlinear problems of analysis in geometry and mechanics. (82d:00005)
- Nonlinear problems of analysis in geometry and mechanics** ★Nonlinear problems of analysis in geometry and mechanics. (82d:00005)
- Operator equations** ★Качественные и приближенные методы исследования операторных уравнений. (Russian) [Qualitative and approximate methods for the investigation of operator equations] (82d:00006)
- Qualitative and approximate methods for the investigation of operator equations** ★Качественные и приближенные методы исследования операторных уравнений. (Russian) [Qualitative and approximate methods for the investigation of operator equations] (82d:00006)
- Symposium:**
- Problems in Nonlinear Analysis in Geometry and Mechanics** ★Nonlinear problems of analysis in geometry and mechanics. (82d:00005)
- Theoretical and applied mechanics** ★Theoretical and applied mechanics. (82d:00008)
- Theory of analytic functions and harmonic analysis** ★Теория аналитических функций и гармонический анализ. (Russian) [Theory of analytic functions and harmonic analysis] (82d:00009)
- Toronto, Ont.** ★Theoretical and applied mechanics. (82d:00008)
- Toulouse** ★Nonlinear problems of analysis in geometry and mechanics. (82d:00005)

00A15 General bibliographies

- Bach, Charles L. See Hanson, Morgan A.; et al., 82e:00013
- Barker, Lawrence E. See Hanson, Morgan A.; et al., 82e:00013
- (Beckenbach, Edwin F.) See Index: Math. Mag., 82h:00006
- (Betkowska, Krystyna) See Polish bibliography on the philosophy of science and technology during the years 1974-1976, 82f:00009
- Bresson, D. See Monjardet, Bernard, 82e:00014
- Cooley, Edward A. See Hanson, Morgan A.; et al., 82e:00013
- (Gasparski, Wojciech) See Polish bibliography on the philosophy of science and technology during the years 1974-1976, 82f:00009
- Hanson, Morgan A. (with Barker, Lawrence E.; Bach, Charles L.; Cooley, Edward A.; Hunter, Charles H.) A bibliography of weather modification experiments. 82e:00013
- Hunter, Charles H. See Hanson, Morgan A.; et al., 82e:00013
- (Jedlińska, Marianna) See Polish bibliography on the philosophy of science and technology during the years 1974-1976, 82f:00009
- (Majewska-Tronowicz, Jadwiga) See Polish bibliography on the philosophy of science and technology during the years 1974-1976, 82f:00009
- Monjardet, Bernard (with Bresson, D.) Quasi-ordres, intervalles, etc.: une bibliographie. 82e:00014
- Olinick, Michael Mathematical models in the social and life sciences: a selected bibliography. 82m:00011
- (Olszewski, Eugeniusz) See Polish bibliography on the philosophy of science and technology during the years 1974-1976, 82f:00009
- Reutenauer, Christophe Une bibliographie sur les séries formelles en variables non commutatives. 82g:00003
- Schlipke, Siegfried ★Bibliographie zur Quadratur und Kubatur. (German) [Bibliography on quadrature and cubature] 82g:00004
- (Seebach, J. Arthur) See Index: Math. Mag., 82h:00006
- (Steen, Lynn Arthur) See Index: Math. Mag., 82h:00006
- Tropfke, Johannes ★Bibliographie zur Geschichte der Elementarmathematik. (German) [Bibliography to History of elementary mathematics] 82k:00012
- Bibliography:**
- History of elementary mathematics** See Tropfke, Johannes, 82k:00012
- Mathematical models in the social and life sciences** See Olinick, Michael, 82m:00011
- Nonsmooth optimization** Bibliography. 82e:00005
- Philosophy of science and technology** ★Polska bibliografia naukoznawstwa i technoznawstwa za lata 1974-1976. (Polish) [Polish bibliography on the philosophy of science and technology during the years 1974-1976] 82f:00009
- Quadrature and cubature** See Schlipke, Siegfried, 82g:00004
- Semiorders** See Monjardet, Bernard; et al., 82e:00014
- Weather modification experiments** See Hanson, Morgan A.; et al., 82e:00013
- Index:**
- Académie des Sciences** ★Index biographique de l'Académie des Sciences (1666-1978). (French) [Biographical index of the Academy of Sciences (1666-1978)] 82e:00015
- Enseign. Math. (2)** Table alphabétique des auteurs. IIe Série. Tomes XVI à XXV, 1970-1979. 82f:00006
- Kódai Math. Sem. Rep.** Total index, Vol. 1 (1949)-Vol. 29 (1977). 82e:00016
- Lecture Notes in Physics** ★An index and other useful information. 82f:00007
- Math. Mag.** ★Mathematics Magazine: 50 year index. 82h:00006
- Stud. Appl. Math.** Index to Volumes 47 through 59 (1968-1978). 82j:00012
- Z. Wahrsch. Verw. Gebiete** Author index for Volumes 1-50 (1962-1979). 82f:00008
- Polish bibliography on the philosophy of science and technology during the years 1974-1976** ★Polska bibliografia naukoznawstwa i technoznawstwa za lata 1974-1976. (Polish) [Polish bibliography on the philosophy of science and technology during the years 1974-1976] 82f:00009
- Quadrature and cubature** See Schlipke, Siegfried, 82g:00004

secondary classifications:

- Balzer, Cindy See Tomber, Marvin L.; et al., (82i:17001)
- Collomb, Gérard Estimation non-paramétrique de la régression: revue bibliographique. (English summary) (82c:62073)
- Coryell, Hellen See Tomber, Marvin L.; et al., (82i:17001)
- (Haruki, Shigeru) See Bibliography: Functional equations, (82e:39005)
- Høyrup, Else ★Women and mathematics, science and engineering. (82a:00005)
- Kinowska, Małgorzata See Majewska-Tronowicz, Jadwiga; et al., (82h:01004a) and (82h:01004b)
- Majewska-Tronowicz, Jadwiga (with Michalczyk, Barbara; Kinowska, Małgorzata) Current bibliography of the history of science and technology. No. 34 (April-July 1979). (Polish) (82h:01004a)
- (with Michalczyk, Barbara; Kinowska, Małgorzata) Current bibliography of the history of science and technology. No. 35/36 (July-Dec. 1979). (Polish) (82h:01004b)
- Michalczyk, Barbara See Majewska-Tronowicz, Jadwiga; et al., (82h:01004a) and (82h:01004b)
- Müller, Felix ★Führer durch die mathematische Literatur. (German) [Guide to mathematical literature] (82f:01184)
- Norris, Diane M. See Tomber, Marvin L.; et al., (82i:17001); (82i:17002) and (82j:17001)
- Ordway, Judy See Tomber, Marvin L.; et al., (82i:17001)
- Reynolds, Mary See Tomber, Marvin L.; et al., (82i:17001)
- Smith, C. L. See Tomber, Marvin L.; et al., (82i:17002) and (82j:17001)
- Stancu-Minasian, I. M. Bibliography of fractional programming, 1960-1976. (82i:90115)
- Terry, Tamara See Tomber, Marvin L.; et al., (82i:17001)
- Tomber, Marvin L. (with Norris, Diane M.; Reynolds, Mary; Balzer, Cindy; Trebilcock, Kathy; Terry, Tamara; Coryell, Hellen; Ordway, Judy) A nonassociative algebra bibliography. (82i:17001)
- (with Smith, C. L.; Norris, Diane M.; Welk, R.) Addenda to: "A nonassociative algebra bibliography" [Hadronic J. 3 (1979/80), no. 1, 507-725; MR 82i:17001]. (82i:17002)
- (with Smith, C. L.; Norris, Diane M.) A subject index of works relating to nonassociative algebras. (82j:17001)
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(Einstein, Albert) See Some strangeness in the proportion. (82d:83002)

Galletto, Dionigi The foundations of Newtonian mechanics and the Newtonian theory of gravity. (Italian) (82m:83041)

Hudson, J. A. Mathematics for seismology. (82d:86001)

(Landé, Alfred) See Perspectives in quantum theory. (82d:81002)

(van der Merwe, Alwyn) See Perspectives in quantum theory. (82d:81002)

(Woolf, Harry) See Some strangeness in the proportion. (82d:83002)

(Yourgrau, Wolfgang) See Perspectives in quantum theory. (82d:81002)

Perspectives in quantum theory ★Perspectives in quantum theory. (82d:81002)

Princeton, N.J. ★Some strangeness in the proportion. (82d:83002)

Quantum theory ★Perspectives in quantum theory. (82d:81002)

Some strangeness in the proportion ★Some strangeness in the proportion. (82d:83002)

Symposium:

Einstein Centennial ★Some strangeness in the proportion. (82d:83002)

00A99 Miscellaneous topics

Martio, Olli On mathematical research. (Finnish) 82h:00021

secondary classifications:

Celmins, Uldis A. The Hungarian magic cube puzzle. (82d:20009)

01-XX HISTORY AND BIOGRAPHY [See also the classification number -03 in the other sections.]

01-01 Elementary exposition, textbooks

Bertolino, Milorad Mathematics in the course of history. (Serbo-Croatian) 82c:01001

Bochner, Salomon ★The role of mathematics in the rise of science. 82j:01001

Borodin, A. I. ★Советские математики. (Russian) [Soviet mathematicians] 82a:01001

Bourbaki, Nicolas ★Éléments d'histoire mathématique. (Polish) [Elements of the history of mathematics] 82c:01002

(Dobrzycki, Stanisław) See Bourbaki, Nicolas. 82c:01002

Gericke, Helmuth ★Wie dachten und denken die Mathematiker über das Unendliche? (German) [What did and what do mathematicians think about the infinite?] 82j:01002b

Wie dachten und denken die Mathematiker über das Unendliche? 82j:01002a

(Kapica, S. P.) See Outstanding scientists. 82g:01001

(Lezama y Noriega, Pedro) See Struik, D. J., 82c:01003

Nicolson, Iain ★Gravity, black holes and the universe. 82j:01003

(Pogrebysskii, I. B.) See Struik, D. J., 82i:01001

Rožanskii, I. D. ★Античная наука. (Russian) [Ancient science] 82k:01001

Struik, D. J. ★Краткий очерк истории математики. (Russian) [A short outline of the history of mathematics] 82i:01001

★Historia concisa de las matemáticas. (Spanish) [A concise history of mathematics] 82c:01003

Outstanding scientists ★Замечательные ученые. (Russian) [Outstanding scientists] 82g:01001

secondary classifications:

Pareja Heredia, Diego Historical account of some problems in the theory of numbers. (Spanish) (82h:10001)

Ribenboim, Paulo Fermat's last theorem: recent developments. (82h:10023)

01-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

Santaló, Luis Antonio Integral geometry: history and perspectives. (82h:53083)

01-06 Proceedings, conferences, etc.

(Agazzi, Evandro) See Proceedings: Pisa Conference on the History and Philosophy of Science. 82f:01001

(Bălăceanu, Constantin) See Odobleja: Between Ampère and Wiener. 82h:01002

(Bašmakova, I. G.) See History and methodology of the natural sciences. 82c:01004

(Biermann, Kurt-Reinhard) See Mathematical perspectives. 82j:01004

(Bogoljubov, O. M.) See Questions on the history of mathematical natural science. 82i:01003

(Czartoryski, Paweł) See Science and history. 82c:01003

(Dauben, Joseph W.) See Mathematical perspectives. 82j:01004

(Dragănescu, Mihai) See Odobleja: Between Ampère and Wiener. 82h:01002

(Dugac, Pierre) See Cahiers du Séminaire d'Histoire des Mathématiques. 82c:01001

(Finster, Reinhard) See Theoria cum praxi: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. 82h:01003

(García, Santiago) See Congress: Spanish Society for the History of Science. 82d:01001

(Giuculescu, Alexandru) See Odobleja: Between Ampère and Wiener. 82h:01002

(Gohu, Pantelimon) See Odobleja: Between Ampère and Wiener. 82h:01002

(Grande, Frank D.) See Science and history. 82c:01003

(Gruender, David) See Proceedings: Pisa Conference on the History and Philosophy of Science. 82f:01001

(Hall, Carl) See American mathematical heritage: algebra and applied mathematics. 82k:01002

(Heinekamp, Albert) See Theoria cum praxi: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. 82h:01003

(Hilfstein, Erna) See Science and history. 82c:01003

(Hintikka, Jaakko) See Proceedings: Pisa Conference on the History and Philosophy of Science. 82f:01001

(Leibniz, Gottfried Wilhelm) See Theoria cum praxi: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. 82h:01003

(Moore, Marion E.) See American mathematical heritage: algebra and applied mathematics. 82k:01002

(Nory, Luboš) See Revolutionary developments in the field of science and engineering. 82g:01002

(Odobleja, Ștefan) See Odobleja: Between Ampère and Wiener. 82h:01002

(Rinow, Willi) See Colloquium: Rinow, Willi. 82c:01002

(Rosen, Edward) See Science and history. 82c:01003

(Rybníkov, K. A.) See History and methodology of the natural sciences. 82c:01004

(Tarwater, J. Dalton) See American mathematical heritage: algebra and applied mathematics. 82k:01002

(Taton, René) See Cahiers du Séminaire d'Histoire des Mathématiques. 82c:01001

(Tjulina, I. A.) See History and methodology of the natural sciences. 82c:01004

(Umezawa, Toshio) See Collection: Mathematics and mathematical education. 82i:01002

(White, John T.) See American mathematical heritage: algebra and applied mathematics. 82k:01002

American mathematical heritage: algebra and applied mathematics ★American

mathematical heritage: algebra and applied mathematics. 82k:01002

Arlington, Tex. ★American mathematical heritage: algebra and applied mathematics. 82k:01002

Cahiers du Séminaire d'Histoire des Mathématiques ★Cahiers du Séminaire d'Histoire des Mathématiques. 2. (French) [Proceedings of the Seminar on the History of Mathematics. 2.] 82c:01001

Collection:

Mathematics and mathematical education ★Sūgaku, sūgaku kyōiku rombunshū. No. 1. [Collection of articles on mathematics and mathematical education. No. 1] 82i:01002

Colloquium:

Rinow, Willi ★Colloquium in memoriam Prof. Willi Rinow. (German) 82c:01002

Conference:

History and Philosophy of Science ★Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. I. 82f:01001a

★Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. II. 82f:01001b

Revolutionary Developments in the Field of Science and Engineering ★Revoluční změny v oblasti vědy a techniky. (Czech) [Revolutionary developments in the field of science and engineering] 82g:01002

Congress:

Leibniz ★Theoria cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18. Jahrhundert. Band I. (German) [Theory and praxis: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. Vol. I.] 82h:01003

Spanish Society for the History of Science ★I Congreso de la Sociedad Española de Historia de las Ciencias. (Spanish) [First Congress of the Spanish Society for the History of Science] 82d:01001

Düsseldorf ★Innovation im 15./16. und im 19. Jahrhundert als technikgeschichtliches Problem. 82h:01001

El Paso, Tex. ★American mathematical heritage: algebra and applied mathematics. 82k:01002

Greifswald ★Colloquium in memoriam Prof. Willi Rinow. (German) 82c:01002

Hannover ★Theoria cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18. Jahrhundert. Band I. (German) [Theory and praxis: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. Vol. I.] 82h:01003

History and methodology of the natural sciences ★История и методология естественных наук. Вып. XXV. (Russian) [History and methodology of the natural sciences. No. XXV] 82c:01004

History of science ★I Congreso de la Sociedad Española de Historia de las Ciencias. (Spanish) [First Congress of the Spanish Society for the History of Science] 82d:01001

Innovation in the fifteenth-sixteenth and in the nineteenth centuries over a problem of the history of technology ★Innovation im 15./16. und im 19. Jahrhundert als technikgeschichtliches Problem. 82h:01001

Liblice ★Revoluční změny v oblasti vědy a techniky. (Czech) [Revolutionary developments in the field of science and engineering] 82g:01002

Madrid ★I Congreso de la Sociedad Española de Historia de las Ciencias. (Spanish) [First Congress of the Spanish Society for the History of Science] 82d:01001

Mathematical perspectives ★Mathematical perspectives. 82j:01004

Meeting:

Innovation in the Fifteenth-Sixteenth and in the Nineteenth Centuries as a Problem of the History of Technology ★Innovation im 15./16. und im 19. Jahrhundert als technikgeschichtliches Problem. 82h:01001

Natural sciences ★История и методология естественных наук. Вып. XXV. (Russian)

[History and methodology of the natural sciences. No. XXV] 82c:01004

Odobleja: Between Ampère and Wiener ★Odobleja: Between Ampère and Wiener. 82h:01002

Pisa ★Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. I. 82f:01001a

★Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. II. 82f:01001b

Probabilistic thinking, thermodynamics and the interaction of the history and philosophy of science ★Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. II. 82f:01001b

Proceedings:

Pisa Conference on the History and Philosophy of Science ★Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. I. 82f:01001a

★Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. II. 82f:01001b

Questions on the history of mathematical natural science ★Вопросы истории математического естествознания. (Russian) [Questions on the history of mathematical natural science] 82i:01003

Revolutionary developments in the field of science and engineering ★Revoluční změny v oblasti vědy a techniky. (Czech) [Revolutionary developments in the field of science and engineering] 82g:01002

Science and history ★Science and history. 82e:01003

Symposium:

American Mathematical Heritage ★American mathematical heritage: algebra and applied mathematics. 82k:01002

★American mathematical heritage: algebra and applied mathematics. 82k:01002

History of Algebra ★American mathematical heritage: algebra and applied mathematics. 82k:01002

History of Applied Mathematics ★American mathematical heritage: algebra and applied mathematics. 82k:01002

Theoria cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18. Jahrhundert ★Theoria cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18.

Jahrhundert. Band I. (German) [Theoria cum praxi: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. Vol. I] 82h:01003

Theory change, ancient axiomatics, and Galileo's methodology ★Proceedings of the 1978 Pisa Conference on the History and Philosophy of Science. Vol. I. 82f:01001a

Theory and praxis: on the relationship of theory and praxis in the seventeenth and eighteenth centuries ★Theoria cum praxi: zum Verhältnis von Theorie und Praxis im 17. und 18. Jahrhundert. Band I. (German) [Theory and praxis: on the relationship of theory and praxis in the seventeenth and eighteenth centuries. Vol. I] 82h:01003

secondary classifications:

(Bertin, E. M. J.) See Two decades of mathematics in the Netherlands, 1920-1940. (82h:01040)

(Bos, H. J. M.) See Two decades of mathematics in the Netherlands, 1920-1940. (82h:01040)

(Descartes, René) See Collection: Descartes, René. (82m:01035)

(Einstein, Albert) See Albert Einstein and the theory of gravitation, (82a:83002); Some strangeness in the proportion, (82d:83002) and Impact of modern scientific ideas on society. (82k:01046)

(Gaukroger, Stephen) See Collection: Descartes, René. (82m:01035)

(Gödel, Kurt) See Gödel's theorem and the continuum hypothesis. (82h:03003)

(Green, Melville S.) See Perspectives in statistical physics. (82h:82001)

(Grootendorst, A. W.) See Two decades of mathematics in the Netherlands, 1920-1940. (82h:01040)

(Kholodilin, A. N.) See Impact of modern scientific ideas on society. (82k:01046)

(Kinnon, Colette M.) See Impact of modern scientific ideas on society. (82k:01046)

(Kuranskii, E.) See Albert Einstein and the theory of gravitation, (82a:83002)

(Leibniz, Gottfried Wilhelm) See Leibniz' calculation with zero and one. (82a:01013)

(Leontović, M. A.) See Collection: Mandel'stam, L. I. (82g:01085)

(Lourenço, Manuel) See Gödel's theorem and the continuum hypothesis. (82h:03003)

(Mandel'stam, L. I.) See Collection: Mandel'stam, L. I. (82g:01085)

(Mostepanenko, A. M.) See Quantum mechanics and the theory of relativity. (82g:81003)

(Ne'eman, Yuval) See To fulfill a vision. (82d:83003)

(Pavinskii, P. P.) See Quantum mechanics and the theory of relativity. (82g:81003)

(Prohorov, A. M.) See Collection: Mandel'stam, L. I. (82g:01085)

(Raveché, H. J.) See Perspectives in statistical physics. (82h:82001)

(Richardson, J. G.) See Impact of modern scientific ideas on society. (82k:01046)

(Rjabuškin, T. V.) See Statistical methods in control. (82k:90004)

(Rytov, S. M.) See Collection: Mandel'stam, L. I. (82g:01085)

(Woolf, Harry) See Some strangeness in the proportion. (82d:83002)

Anniversary:

Birth of Mandel'stam, L. I. ★Академик Л. И. Мандельштам. (Russian)

[Academician L. I. Mandel'stam] (82g:01085)

Wiskundig Genootschap ★Two decades of mathematics in the Netherlands.

1920-1940. (82h:01040)

Bibliography:

Green, Melville S. ★Perspectives in statistical physics. (82h:82001)

Collection:

Descartes, René ★Descartes. (82m:01035)

Mandel'stam, L. I. ★Академик Л. И. Мандельштам. (Russian) [Academician L. I. Mandel'stam] (82g:01085)

Continuum hypothesis ★O teorema de Gödel e a hipótese do continuo. (Portuguese) [Gödel's theorem and the continuum hypothesis] (82h:03003)

Control ★Статистические методы в управлении. (Russian) [Statistical methods in control] (82k:90004)

Albert Einstein and the theory of gravitation ★Альберт Эйнштейн и теория гравитации.

(Russian) [Albert Einstein and the theory of gravitation] (82a:83002)

Gauge theory ★To fulfill a vision. (82d:83003)

Gödel's theorem and the continuum hypothesis ★O teorema de Gödel e a hipótese do continuo. (Portuguese) [Gödel's theorem and the continuum hypothesis] (82h:03003)

Gravitation ★Альберт Эйнштейн и теория гравитации. (Russian) [Albert Einstein and the theory of gravitation] (82a:83002)

Impact of modern scientific ideas on society ★The impact of modern scientific ideas on society. (82k:01046)

Jerusalem ★To fulfill a vision. (82d:83003)

Leibniz' calculation with zero and one ★Herrn von Leibniz' Rechnung mit Null und Eins. (German) [Leibniz' calculation with zero and one] (82a:01013)

Mathematical physics ★Descartes. (82m:01035)

Munich ★The impact of modern scientific ideas on society. (82k:01046)

Perspectives in statistical physics ★Perspectives in statistical physics. (82h:82001)

Philosophy ★Descartes. (82m:01035)

Princeton, N.J. ★Some strangeness in the proportion. (82d:83002)

Quantum mechanics and the theory of relativity ★Квантовая механика и теория относительности. (Russian) [Quantum mechanics and the theory of relativity] (82g:81003)

Relativity ★Квантовая механика и теория относительности. (Russian) [Quantum mechanics and the theory of relativity] (82g:81003)

Some strangeness in the proportion ★Some strangeness in the proportion. (82d:83002)

Statistical methods in control ★Статистические методы в управлении. (Russian)

[Statistical methods in control] (82k:90004)

Statistical physics ★Perspectives in statistical physics. (82h:82001)

Symposium:

Einstein Centennial ★Some strangeness in the proportion. (82d:83002)

Jerusalem Einstein Centennial, Gauge Theories and Unification of Physical Forces

★To fulfill a vision. (82d:83003)

UNESCO, Impact of Modern Scientific Ideas on Society ★The impact of modern scientific ideas on society. (82k:01046)

To fulfill a vision ★To fulfill a vision. (82d:83003)

Two decades of mathematics in the Netherlands, 1920-1940 ★Two decades of

mathematics in the Netherlands, 1920-1940. (82h:01040)

Ulm ★The impact of modern scientific ideas on society. (82k:01046)

01A05 General histories, source books

Behrsin, M. P. Concepts of force and motion since 1687. 82d:01002

(Beran, Jiří) See Source material for the history of natural science and technology. 82e:01006a

Bykov, G. V. Historiographic models. (Russian. English summary) 82d:01003

Crossley, John N. ★The emergence of number. 82c:01005

Dhombres, Jean ★Étude épistémologique et historique des idées de nombre, de mesure et de continu. Tome I. (French) [An epistemological and historical study of the ideas of number, measure and continuum. Vol. I] 82c:01006

Dieudonné, Jean A. The progress of mathematics. (Bulgarian) 82e:01004

(Dimovski, Ivan) See Dieudonné, Jean A. 82e:01004

Eĭnatsova, B. A. Application of the sieve method to the problem of determining the number of primes. (Russian. Tajiki summary) 82m:01001

Goldstein, Bernard R. The status of models in ancient and medieval astronomy.

82d:01004

(Goldstone, H. H.) See Salzer, Herbert E. 82h:01001

Kinowska, Małgorzata See Majewska-Tronowicz, Jadwiga; et al. 82h:01004

Majewska-Tronowicz, Jadwiga (with Michalczyk, Barbara; Kinowska, Małgorzata)

Current bibliography of the history of science and technology. No. 34 (April-July 1979). (Polish) 82h:01004a

(with Michalczyk, Barbara; Kinowska, Małgorzata) Current bibliography of the history of science and technology. No. 35/36 (July-Dec. 1979). (Polish) 82h:01004b

(Markova, L. A.) See North, John D. 82j:01005

Meyer, Heiner Über einige historische und philosophische Aspekte des

Unendlichkeitsbegriffs in der Mathematik. 82d:01005

Michalczyk, Barbara See Majewska-Tronowicz, Jadwiga; et al. 82h:01004

(Moulines, Carlos-Ulises) See North, John D. 82j:01005

North, John D. On making history. 82j:01005

(Rafaj, Pavel) See Source material for the history of natural science and technology. 82e:01006b

Rubin, Michael Architecture and geometry. (French summary) 82e:01005

Salzer, Herbert E. Errata: A history of numerical analysis from the 16th through the 19th century [Springer, New York, 1977; MR 58 #4774] by H. H. Goldstone. 82b:01001

(Sládek, Oldřich) See Source material for the history of natural science and technology. 82e:01006b

Struik, D. J. The historiography of mathematics from Proklos to Cantor. 82h:01005

Tietze, Heinrich ★Gelöste und ungelöste mathematische Probleme aus alter und neuer Zeit. (German) [Solved and unsolved mathematical problems from the past and the present] 82c:01007

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History of science and technology Current bibliography of the history of science and technology. No. 32 (July-Sept. 1978). (Polish) 82g:01003

See also Majewska-Tronowicz, Jadwiga; et al. 82h:01004

Source material for the history of natural science and technology ★Prameny k dějinám přírodních věd a techniky v pražských archivech, 1918-1945. (Czech) [Source material for the history of natural science and technology in Prague archives, 1918-1945]

82e:01006a

★Prameny k dějinám přírodních věd a techniky. II. Archivy středoevropského, jihočeského a západočeského kraje, 1918-1945. (Czech) [Source material for the history of natural science and technology. II. Archives of central, southern and western Bohemia, 1918-1945] 82e:01006b

secondary classifications:

- Demidov, S. S. On axiomatic and genetic construction of mathematical theories. (82i:00016)
- Eves, Howard ★Great moments in mathematics. (82i:01007)
- (Grattan-Guinness, Ivor) See History and philosophy of logic. (82g:03005)
- Hudson, J. A. Mathematics for seismology. (82d:86001)
- Kozlova, M. S. The role of philosophical ideas in the genesis of science. (Russian. English summary) (82h:00008)
- Marie, Maximilien ★Histoire des sciences mathématiques et physiques. (French) [History of mathematical and physical sciences] (82e:01126a)
- ★Histoire des sciences mathématiques et physiques. (French) [History of mathematical and physical sciences] (82e:01126b)
- ★Histoire des sciences mathématiques et physiques. (French) [History of mathematical and physical sciences] (82e:01126c)
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- Moutsopoulos, Evangelos A. Continuité et discontinuité en histoire. (82k:00022)
- Opolka, Hans See Scharlau, Winfried, (82g:10001)
- Scharlau, Winfried (with Opolka, Hans) ★Von Fermat bis Minkowski. (German) [From Fermat to Minkowski] (82g:10001)
- Tropfke, Johannes ★Bibliographie zur Geschichte der Elementarmathematik. (German) [Bibliography to History of elementary mathematics] (82k:00012)
- Yabuuchi, Kiyoshi Astronomy in the East and the West: the development and characteristics. (82g:01006)
- Yuan, Xiang Wan The axiomatic method and its function. (Chinese. English summary) (82d:00012)
- Zweifel, P. F. Twenty years of transport theory. (82e:82026)
- Bibliography:
- History of elementary mathematics See Tropfke, Johannes, (82k:00012)
- History and philosophy of logic ★History and philosophy of logic. Vol. 1. (82g:03005)
- Logic ★History and philosophy of logic. Vol. 1. (82g:03005)

01A10 Primitive, Paleolithic, Neolithic

- Aveni, Anthony F. (with Hartung, H.) The observation of the Sun at the time of passage through the zenith in Mesoamerica. 82k:01003
- Archaeoastronomy in the Maya region: a review of the past decade. 82k:01004
- Tropical archaeoastronomy. 82j:01006
- Brunet, J.-P. See Lebeuf, A.; et al., 82f:01003
- Casey, J. See Seidenberg, A., 82j:01008
- Hartung, H. See Aveni, Anthony F., 82k:01003
- Heggie, Douglas C. Highlights and problems of megalithic astronomy. 82k:01005
- Lambert, Joseph B. (with Ownbey-McLaughlin, Barbara; McLaughlin, Charles D.) Maya arithmetic. 82f:01002
- Lebeuf, A. (with Brunet, J.-P.; Nadal, R.) Un observatoire paléo-astronomique à St-Lizier. (English summary) 82f:01003
- McLaughlin, Charles D. See Lambert, Joseph B.; et al., 82f:01002
- Morrison, L. V. On the analysis of megalithic lunar sightlines in Scotland. 82e:01007
- Nadal, R. See Lebeuf, A.; et al., 82f:01003
- Nakano, Toshio The knotted cord of the Ami of Taiwan. (Japanese) 82j:01007
- Ownbey-McLaughlin, Barbara See Lambert, Joseph B.; et al., 82f:01002
- Schmitt, Robert C. Early Hawaiian statistics. 82h:01002
- Seidenberg, A. (with Casey, J.) The ritual origin of the balance. 82j:01008
- Thom, Alexander (with Thom, Archibald S.) A new study of all megalithic lunar lines. 82e:01008
- (with Thom, Archibald S.) Astronomical foresights used by megalithic man. 82f:01004
- Thom, Archibald S. See Thom, Alexander, 82e:01008 and 82f:01004
- van der Waerden, B. L. On pre-Babylonian mathematics. I. 82a:01002a
- On pre-Babylonian mathematics. II. 82a:01002b

secondary classifications:

- Amir-Moéz, Ali R. ★String figures—a symbolic approach. (82e:00002)
- Holmes, Dorothy See Mardia, K. V., (82a:62077)
- Mardia, K. V. (with Holmes, Dorothy) A statistical analysis of megalithic data under elliptic pattern. (82a:62077)
- 01A15 Pre-Greek, Egyptian
- (Black, Matthew) See "Astronomical" chapters of the Ethiopic Book of Enoch (72–82), 82m:01002
- Charum, Jorge History of numbers. (Spanish) 82k:01006
- (Neugebauer, Otto) See "Astronomical" chapters of the Ethiopic Book of Enoch (72–82), 82m:01002
- Raik, A. E. ★Очерки по истории математики в древности. (Russian) [Outlines of a history of mathematics in antiquity] 82a:01003
- "Astronomical" chapters of the Ethiopic Book of Enoch (72–82) The "astronomical" chapters on the Ethiopic Book of Enoch (72 to 82). 82m:01002

secondary classifications:

- Ernest, P. On the adequacy of the Egyptian representation of fractions. (82m:10014)
- Fleckenstein, J. O. Die hermetische Tradition in der Kosmologie Newtons. (82d:01010)
- List, Martha Marginalien zum Handexemplar Keplers von Copernicus: *De Revolutionibus orbium coelestium* (Nürnberg, 1543). (See 82e:01003)
- (Newton, Isaac) See Fleckenstein, J. O., (82d:01010)
- Rees, Charles Sparks Egyptian fractions. (82m:10016)

01A17 Babylonian

- Aaboe, Asger Observation and theory in Babylonian astronomy. 82i:01004
- Brack-Bermsen, Lis Some investigations on the ephemerides of the Babylonian Moon texts, system A. 82h:01006
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- D'Ambrosio, Ubiratan Recent tendencies in the teaching of the sciences and in particular of mathematics. (Spanish) (82m:00013)

- Davis, Philip J. (with Hersh, Reuben) ★The mathematical experience. (82i:00020)

- (Einstein, Albert) See Schlicker, Wolfgang, (82g:01068)

- Fang, J. The politics of the infinite: a "Parerga and paralipomena". (82m:00014)

- Heims, Steve J. ★John von Neumann and Norbert Wiener. (82f:01111)

- Hersh, Reuben See Davis, Philip J., (82i:00020)

- Heyrup, Else ★Women and mathematics, science and engineering. (82a:00005)

- Kedrov, B. M. On the present-day classification of sciences (basic tendencies in its evolution). (Russian. English summary) (82k:00020)

- Lefebvre, Vladimir A. (with Batchelder, William H.) The nature of Soviet mathematical psychology. (82h:92001)

- Lehti, Raimo The role of the history of science within the science of science. (Finnish. English summary) (82m:00004)

- Loi, Maurice Le nouvel esprit mathématique. (82e:00025)

- Luchins, Edith H. Women and mathematics: fact and fiction. (82i:00002)

- McMorris, Michael N. The categorical questions in science. (Italian summary) (82e:00026)

- Michiwaki, Yoshimasa On the resemblance between the presentations and the formation processes of modern mathematical papers and those of old mathematical tablets in Japan. (82k:01011)

- Nakayama, Shigeru Two academic traditions in comparison: Western and Chinese. (82g:01005)

- (von Neumann, John) See Heims, Steve J., (82f:01111)

- Norý, Luboš International and national science. Historical aspects. (Czech. Russian and English summaries) (82e:01113)

- (Nowak, T. M.) See Schlicker, Wolfgang, (82g:01068)

- (Pearson, Karl) See Ando, Hiromi, (82f:01073)

- Perl, Teri Hoch The Ladies' Diary or Woman's Almanack, 1704–1841. (German and French summaries) (82i:01024)

- Pohl, Ira (with Shaw, Alan C.) ★The nature of computation: an introduction to computer science. (82j:68002)

- Rees, Mina The mathematical sciences and World War II. (82j:01059)

- (Rota, Gian-Carlo) See Davis, Philip J.; et al., (82i:00020)

- Schlicker, Wolfgang Genesis and duration of quarrels about Albert Einstein in Germany from 1920 to 1922/23. (Polish. Russian and English summaries) (82g:01068)

- Schubert, Hans Lichtensteins Verhältnis zu den Grundbegriffen der Mechanik. (82h:01065)

- Shaw, Alan C. See Pohl, Ira, (82j:68002)

- Strube, Irene Beiträge des Karl-Sudhoff-Instituts zur Entwicklung einer marxistischen Geschichte der Naturwissenschaften. (82m:01078)

- Süss, Irmgard Origin of the Mathematical Research Institute Oberwolfach at the country seat "Lorenzenhof". (82g:01088)

- Tibenský, Ján National science and its relationship to international science as a methodological problem of the history of science. (Czech. Russian and English summaries) (82e:01114)

- Westman, Robert S. The astronomer's role in the sixteenth century: a preliminary study. (82e:01030)

- (Wiener, Norbert) See Heims, Steve J., (82f:01111)

Conference:

- Mathematics in the Intellectual Life and Society of Tomorrow Round table on "Mathematics in the intellectual life and society of tomorrow". (Italian)

(82i:00030)

01A99 Miscellaneous topics

- Houlden, Michael A. See Stephenson, F. Richard, 82i:01076
 Kaunzner, Wolfgang Über eine Entwicklung in der Dimensionsrechnung. 82h:01079
 Kilmister, C. W. Zeno, Aristotle, Weyl and Shuard: two-and-a-half millennia of worries over number. 82i:01075
 Lorch, Richard The sphaera solida and related instruments. 82a:01057
 Murdoch, John E. Utility versus truth: at least one reflection on the importance of the philosophy of science for the history of science. 82j:01086
 Patel, D. M. Symbols for 1, 2, 3, 4, 5, 6, 7, 8, 9 & 0 in Sanskrit and English languages. 82h:01080
 (Romanowska, Anna B.) See Wille, Rudolf, 82m:01085
 Stephenson, F. Richard (with Houlden, Michael A.) The accuracy of Tuckerman's solar and planetary tables. 82i:01076
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secondary classifications:

- Apéry, Roger Continu et discontinu. (82j:00002)
 Maeyama, Y. The length of the synodic months. The main historical problem of the lunar motion. (82h:85008)
 Maksakov, V. V. See Spasskii, B. I., (82b:00015)
 Retherford, J. R. Trace. (82k:47002)
 Sinclair, Annette On development of the Riemann mapping theorem and related results. (82k:30001)
 Spasskii, B. I. (with Maksakov, V. V.) Invariant-theoretic (Erlangen) approach to the interrelation of physical theories. (Russian. English summary) (82b:00015)

03-XX MATHEMATICAL LOGIC AND FOUNDATIONS

- Feys, Robert (with Fitch, Frederic B.) ★Los símbolos de la lógica matemática. (Spanish) [Dictionary of symbols of mathematical logic] 82m:03001
 Fitch, Frederic B. See Feys, Robert, 82m:03001
 (Rosique Puerta, Guillermo) See Feys, Robert; et al., 82m:03001
 Dictionary:
 Symbols of mathematical logic See Feys, Robert; et al., 82m:03001

03-01 Elementary exposition, textbooks

- Boolos, George (with Jeffrey, Richard Carl) ★Computability and logic. 82d:03001
 Borga, Marco A comparison of Gödel's incompleteness theorem and Tarski's theorem on the notion of truth. (Italian. English summary) 82g:03001
 Cobors-Fresenborg, Elmar Möglichkeiten und Grenzen einer algorithmischen Mathematik. 82k:03001
 (Franco P., Maria de los Angeles) See Gómez Calderón, Javier, 82i:03001
 Gómez Calderón, Javier ★Lógica simbólica. (Spanish) [Symbolic logic] 82i:03001
 (Gómez P., Javier A.) See Gómez Calderón, Javier, 82i:03001
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 Jeffrey, Richard Carl See Boolos, George, 82d:03001
 Mejibo, Lars C. On nonstandard analysis. (Danish) 82b:03002
 Norwood, F. H. Long proofs. 82m:03002
 (Po Ch., Feo. Javier) See Gómez Calderón, Javier, 82i:03001
 Reichenbach, Hans ★Elements of symbolic logic. 82a:03001
 (Sainz D., Ma. Victoria) See Gómez Calderón, Javier, 82i:03001
 Thiele, Rüdiger ★Mathematische Beweise. (German) [Mathematical proofs] 82k:03002
 Wang, Hao ★Popular lectures on mathematical logic. 82e:03001

secondary classifications:

- Beeson, Michael Some problems in constructive mathematics. (82k:03093)
 Buchberger, Bruno (with Lichtenberger, Franz) ★Mathematik für Informatiker. I. (German) [Mathematics for computer scientists. I.] (82i:00006)
 Freuglia, Paolo On Peano's proof of the theorem on "separate forms" in algebraic logic. (Italian. English summary) (82g:03107)
 Jablonskii, S. V. ★Введение в дискретную математику. (Russian) [Introduction to discrete mathematics] (82h:94001)
 Kirin, V. G. On some applications of a tautology. (Serbo-Croatian summary) (82b:03028)
 Labelle, Anna Some mathematical structures as generalizations of the concept of a set. (Italian. English summary) (82f:03045)
 Lichtenberger, Franz See Buchberger, Bruno, (82i:00006)
 Mostowski, Andrzej An excerpt from the book *Mathematical logic*. (Polish) (82c:01043)

03-02 Advanced exposition (research surveys, monographs, etc.)

- Cohen, L. Jonathan Inductive logic, 1945-1977. (See 82f:03002)
 Kunen, Kenneth ★Set theory. 82f:03001
 Lorenzen, Paul ★Metamathematik. (German) [Metamathematics] 82c:03001
 Manin, Yu. I. ★Вычислимое и невычислимое. (Russian) [Computable and noncomputable] 82i:03002
 Moschovakis, Yiannis N. ★Descriptive set theory. 82e:03002

secondary classifications:

- (Agazzi, Evandro) See Modern logic—a survey. (82f:03002)
 Barwise, K. Jon Infinitary logics. (See 82f:03002)
 Hinman, Peter G. ★Recursion-theoretic hierarchies. (82b:03084)
 Macintyre, Angus Model theory. (See 82f:03002)
 Palladino, Dario An analysis of some models of set theory. (Italian. English summary) (82d:03083)
 Schütte, Kurt Proof theory. (See 82f:03002)

- Logic ★Modern logic—a survey. (82f:03002)
 Modern logic—a survey ★Modern logic—a survey. (82f:03002)

03-03 Historical (must also be assigned at least one classification number from Section 01)

- (d'Ailly, Pierre) See Spade, Paul Vincent, 82h:03001
 Angulo, Ramiro Sketch of the history of the foundations of mathematics. (Spanish) 82i:03003
 (Bolzano, Bernard) See Fedorov, B. I., 82e:03003
 Dummett, Michael Was Frege a philosopher of language? 82g:03002
 Fedorov, B. I. ★Логика Бернарда Больцано. (Russian) [Logic of Bernard Bolzano] 82e:03003
 (Frege, Gottlob) See Potts, Timothy C., 82d:03004 and Sternfeld, Robert, 82d:03006
 Gratian-Guinness, Ivor On the development of logics between the two World Wars. 82k:03003
 Hawkins, Benjamin S. A reassessment of Augustus De Morgan's logic of relations: a documentary reconstruction. 82d:03002
 (Hintikka, Jaakko) See Bertrand Russell's early philosophy, 82e:03005
 Kleene, Stephen C. Origins of recursive function theory. 82d:03003
 Kuzičeva, Z. A. Symbolic logic in the writings of J. H. Lambert. (Russian) 82g:03003
 (Lambert, Johann Heinrich) See Kuzičeva, Z. A., 82g:03003
 McKirahan, R. Diodorus and Prior and the master argument. 82i:03004
 Potts, Timothy C. "The grossest confusion possible?"—Frege and the lambda calculus. 82d:03004
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 Read, Stephen See Priest, Graham, 82d:03005
 (Russell, Bertrand A. W.) See Bertrand Russell's early philosophy, 82e:03005
 Spade, Paul Vincent Recent research on medieval logic. 82e:03004
 ★Peter of Ailly: *Concepts and Insolubles*. 82h:03001
 Sternfeld, Robert Frege's achievements and literal scientific discourse. 82d:03006
 White, Michael J. Necessity and unactualized possibilities in Aristotle. 82g:03004
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 Logic ★Bertrand Russell's early philosophy. Part I. 82e:03005a
 ★Bertrand Russell's early philosophy. Part II. 82e:03005b
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- Abruci, Vito Michele "Proof", "theory", and "foundations" in Hilbert's mathematical work from 1885 to 1900. (82e:01078)
 Alexander, Dietrich See Asser, Günter; et al., (82j:01061)
 (Aristotle) See Pelletier, Francis Jeffrey, (82a:01004)
 Asser, Günter (with Alexander, Dietrich; Metzler, Helmut) Gottlob Frege—Persönlichkeit und Werk. (82j:01061)
 (Bašmakova, I. G.) See History and methodology of the natural sciences, (82e:01004)
 Berka, Karel A reinterpretation of Aristotle's syllogistic. (82c:03014)
 (Bernays, Paul) See Weingartner, Paul, (82f:01155)
 Bernstein, Howard R. Conatus, Hobbes, and the young Leibniz. (82b:01014)
 (Black, Max) See Frege, Gottlob, (82b:03011)
 (Bök, August Friedrich) See Ploucquet, Gottfried, (82h:01032)
 (Boole, George) See Laita, Luis M., (82m:01047)
 (Boole, Mary Everest) See Laita, Luis M., (82m:01047)
 (Brouwer, L. E. J.) See Schlick, Moritz, (82b:03021b)
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 Brutjan, G. A. The logic of David the Invincible (David the Armenian). (Russian. English summary) (82f:01025)
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 (Church, Alonzo) See Birthday: Church, Alonzo, (82b:01065)
 Clark, Romane Acquaintance. (82k:01027)
 Crossley, John N. Reminiscences of logicians. II. (82m:03060)
 (Curry, Haskell B.) See Biography: Curry, Haskell B., (82f:01161) and Bibliography: Curry, Haskell B., (82f:01162)
 (van Dalen, D.) See Brouwer, L. E. J., (82i:03069)
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 Dreyfus, Tommy (with Eisenberg, Theodore) On acceptance of mathematical theories. (82j:01083)
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 Frege, Gottlob ★Gottlob Freges Briefwechsel mit D. Hilbert, E. Husserl, B. Russell, sowie ausgewählte Einzelbriefe Freges. (German) [Gottlob Frege's correspondence with D. Hilbert, E. Husserl, B. Russell, and selected letters of Frege] (82b:01072)
 ★Translations from the philosophical writings of Gottlob Frege. (82b:03011)
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- (82i:03008) and Asser, Günter, et al., (82j:01061)
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 Griffiths, D. A. A reconsideration of Russell's early ontological development. (82i:00021)
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 Knobloch, Eberhard Übersicht über die unveröffentlichten mathematischen Arbeiten von Leibniz (1672-1676) mit einem Anhang über die ersten Ansätze zur algebraischen Indexbezeichnung während der Pariser Zeit. (82e:01041)
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 Kratzsch, Irmgard Material zu Leben und Wirken Freges aus dem Besitz der Universitätsbibliothek Jena. (82j:01048)
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- Bostock, David** ★Logic and arithmetic. Vol. II. (**82h:03033**)
- (Dominguez Rodriguez, J. Manuel) See **Whitehead, Alfred North**; et al., (**82m:01082**)
- Friedman, Joyce** (with Warren, David S.) λ -normal forms in an intensional logic for English. (**82k:03030**)
- Gao, Heng Shan** See **Mo, Shao Kui**, (**82f:03010**)
- Himmion, Roland** Modèle constructible de la théorie des ensembles de Zermelo dans la théorie des types. (**82c:03048**)
- Mo, Shao Kui** (with Gao, Heng Shan) The decidability of the N_0 -validity of formulas in the monadic predicate calculus with enumerative quantifiers, and its applications. (Chinese) (**82f:03010**)
- Nakamura, Akira** See **Ono, Hiroakira**, (**82c:68102**)
- Nerode, Anil** (with Shore, Richard A.) Second order logic and first order theories of

reducibility orderings. (**82g:03078**)

- Ono, Hiroakira** (with Nakamura, Akira) Decidability results on a query language for data bases with incomplete information. (**82c:68102**)
- Russell, Bertrand A. W.** See **Whitehead, Alfred North**, (**82m:01082**)
- Shore, Richard A.** See **Nerode, Anil**, (**82g:03078**)
- Taichin, M. A.** A description of algebraic systems in weak logic of order ω and in program logic. (Russian) (**82c:68031**)
- Warren, David S.** See **Friedman, Joyce**, (**82k:03030**)
- Whitehead, Alfred North** (with Russell, Bertrand A. W.) ★Principia mathematica (hasta el *56). (Spanish) [Principia mathematica (to *56)] (**82m:01082**)

03B20 Fragments of classical logic

- Batens, Diderik** A completeness-proof method for extensions of the implicational fragment of the propositional calculus. **82h:03030**
- Berka, Karel** A reinterpretation of Aristotle's syllogistic. **82c:03014**
- Burgess, John P.** The completeness of intuitionistic propositional calculus for its intended interpretation. **82g:03015**
- Casari, Ettore** Positively omitting types. **82i:03017**
- Citkin, A. I.** An error in a well-known paper of M. Wajsberg. (Russian) **82d:03018**
- Dubikajtis, Lech** (with Dudek, Elżbieta; Konior, Jan) On axiomatics of Jaśkowski's discussive propositional calculus. **82h:03031**
- Dudek, Elżbieta** See **Dubikajtis, Lech**; et al., **82h:03031**
- Dziobiak, Wiesław** The degrees of maximality of the intuitionistic propositional logic and of some of its fragments. **82h:03032**
- Gršin, V. N.** Predicate and set-theoretic calculi based on logic without the contraction rules. (Russian) **82g:03016**
- Gupta, Haragauri N.** On a minimal system of intuitionistically acceptable propositional calculus. **82c:03015**
- Konior, Jan** See **Dubikajtis, Lech**; et al., **82h:03031**
- de Lavalette, G. R. Renard** The interpolation theorem in fragments of logics. **82d:03019**

secondary classifications:

- Biele, Andrzej** On the so-called Tarski's property in the theory of Lindenbaum's oversystem. II. Axiomatizable systems. (**82k:03032**)
- Czelakowski, Janusz** Equivalent logics. II. (**82h:03063**)
- Dywan, Zdzisław** Finite unaxiomatizability of propositional calculi with one variable. (**82i:03013**)
- Fidel, Manuel M.** An algebraic study of logic with constructible negation. (**82i:03075**)
- Grieder, Alfons** On the logic of relations. (French and German summaries) (**82f:03062**)
- Hafner, Izidor** On proof length in the equivalential calculus. (**82d:03094**)
- Meredith, David** A positive logic proof procedure. (**82a:03014**)
- Posy, C. J.** See **de Swart, Henricus Cornelius Maria**, (**82a:03059**)
- Rauszer, Cecylia** An algebraic and Kripke-style approach to a certain extension of intuitionistic logic. (**82k:03100**)
- Schwarz, G. F.** The existence property with parameters for some extensions of the intuitionistic theory of types. (Russian) (**82a:03058**)
- de Swart, Henricus Cornelius Maria** (with Posy, C. J.) Validity and quantification in intuitionism. (**82a:03059**)
- Wojtylak, Piotr** Mutual interpretability of sentential logics. II. (**82k:03033b**)

03B25 Decidability of theories and sets of sentences

- Breban, M.** (with Ferro, Alfredo; Omodeo, Eugenio Giovanni; Schwartz, Jacob T.) Decision procedures for elementary sublanguages of set theory. II. Formulas involving restricted quantifiers, together with ordinal, integer, map, and domain notions. **82i:03018b**
- Cegielski, Patrick** La théorie élémentaire de la multiplication. (English summary) **82d:03020**
- Cherlin, Gregory** Rings of continuous functions: decision problems. **82c:03019**
- Eršov, Ju. L.** ★Проблема разрешимости и конструктивные модели. (Russian) [Decision problems and constructivizable models] **82h:03009**
- On the elementary theories of regularly closed fields. (Russian) **82h:03010**
- Ferro, Alfredo** (with Omodeo, Eugenio Giovanni; Schwartz, Jacob T.) Decision procedures for elementary sublanguages of set theory. I. Multilevel syllogistic and some extensions. **82i:03018a**
- See also **Breban, M.**; et al., **82i:03018b**
- Gao, Heng Shan** See **Mo, Shao Kui**, **82f:03010**
- Gršin, V. N.** Herbrand's theorem for logics without contractions. (Russian) **82d:03021**
- Herre, Heinrich** (with Wolter, Helmut) Untersuchungen zur Theorie der linearen Ordnung in Logiken mit Mächtigkeitsquantoren. **82j:03008**
- Lipshitz, Leonard** Some remarks on the Diophantine problem for addition and divisibility. **82k:03011**
- Manaster, Alfred B.** (with Remmel, Jeffrey B.) Some decision problems for subtheories of two-dimensional partial orderings. **82h:03011**
- Mo, Shao Kui** (with Gao, Heng Shan) The decidability of the N_0 -validity of formulas in the monadic predicate calculus with enumerative quantifiers, and its applications. (Chinese) **82f:03010**
- Omodeo, Eugenio Giovanni** See **Ferro, Alfredo**; et al., **82i:03018a** and **Breban, M.**; et al., **82i:03018b**
- Oppen, Derek C.** Complexity, convexity and combinations of theories. **82a:03013**
- Remmel, Jeffrey B.** See **Manaster, Alfred B.**, **82h:03011**
- Rogava, M. G.** A new decision procedure for SCI. (Russian) **82h:03012**
- Schwartz, Jacob T.** See **Ferro, Alfredo**; et al., **82i:03018a** and **Breban, M.**; et al., **82i:03018b**
- Wolter, Helmut** See **Herre, Heinrich**, **82j:03008**

secondary classifications:

- Anapolitanos, D. A.** (with Välinänen, Jouko) Decidability of some logics with free

- quantifier variables. (82d:03059)
- Anisimov, A. V. Discrete backtracking converters. (82b:68079)
- Baudisch, Andreas (with Seese, Detlef G.; Tuschik, Hans-Peter; Weese, Martin) ★Decidability and generalized quantifiers. (82i:03048)
- The theory of abelian p -groups with the quantifier I is decidable. (82g:03068)
- Baur, Walter On the elementary theory of quadruples of vector spaces. (82g:03056)
- Belegradek, O. V. Decidable fragments of universal theories and existentially closed models. (Russian) (82d:20033)
- Börger, Egon The reachability problem for Petri nets and decision problems for Skolem arithmetic. (82b:03079)
- Bozzi, Silvio (with Meloni, Gian Carlo) Representation of Heyting algebras with covering and propositional intuitionistic logic with local operator. (82k:03099)
- Burgess, John P. Decidability for branching time. (82e:03020)
- Burris, Stanley (with McKenzie, R.) Decidable varieties with modular congruence lattices. (82m:08006)
- Cherlin, Gregory (with van den Dries, Lou; Macintyre, Angus) Decidability and undecidability theorems for PAC-fields. (82g:03057)
- Cherniavsky, J. C. Erratum to: "Function iteration logics and flowchart schemata" [Computing 14 (1975), no. 3, 285–312; MR 53 #14962]. (82h:68005)
- Culik, K., II (with Karhumäki, Juhani) On the equality sets for homomorphisms on free monoids with two generators. (French summary) (82f:68076)
- van den Dries, Lou New decidable fields of algebraic numbers. (82h:03027)
- Some model theory and number theory for models of weak systems of arithmetic. (82f:03029)
- Which curves over \mathbb{Z} have points with coordinates in a discrete ordered ring? (82i:03046)
- See also Cherlin, Gregory; et al., (82g:03057)
- Eklöf, Paul C. (with Mekler, Alan H.) Stationary logic of finitely determinate structures. (82f:03033)
- Eršov, Ju. L. Eliminability of quantifiers in regularly closed fields. (Russian) (82k:03036)
- Fajardo V., Sergio Compactness and decidability of monadic logics with cardinality quantifiers. (Spanish) (82e:03038)
- Grabowski, Jan ★Lineare Methoden in der Theorie der Vektoradditionssysteme. III. (German) [Linear methods in the theory of vector addition systems. III] (82i:68035)
- Hauschild, Kurt Zum Vergleich von Härtingquantor und Rescherquantor. (82h:03033)
- Haussser, David Model completeness of an algebra of languages. (82k:03048)
- Heindorf, Lutz Comparing the expressive power of some languages for Boolean algebras. (82m:03050)
- Herre, Heinrich (with Wolter, Helmut) The decision problem for the theory of linear orderings in extended logics. (82e:03055)
- Huber-Dyson, Verena A reduction of the open sentence problem for finite groups. (82j:03052)
- Jacob, Bill The model theory of generalized real closed fields. (82m:03047)
- Karapetjan, M. S. An effective algorithm for verification of a property of a graph. (Russian) (82h:68036)
- Karhumäki, Juhani See Culik, K., II, (82f:68076)
- Krivoi, S. L. Search for relations in programs over free groups of data. (Russian) (82m:68042)
- Lampe, William A. (with Myers, Dale) Elementary properties of free extensions. (82j:03033)
- Lisovik, L. P. Sets that are expressible in theories of commutative semigroups. (Russian. English summary) (82j:03039)
- Macintyre, Angus See Cherlin, Gregory; et al., (82g:03057)
- Mailbaum, T. S. E. Pumping lemmas for term languages. (82e:68081)
- Markšaitis, H. Solvability of the word problem for certain groups. (Russian. Lithuanian and English summaries) (82e:20067)
- Mayr, Ernst W. (with Meyer, Albert R.) The complexity of the finite containment problem for Petri nets. (82f:68061)
- McKenzie, R. See Burris, Stanley, (82m:08006)
- McRobbie, Michael A. (with Thistlewaite, Paul B.; Meyer, Robert K.) A mechanized decision procedure for nonclassical logics: the program KRIPKE. (82h:03035)
- Mekler, Alan H. See Eklöf, Paul C., (82f:03033)
- Meloni, Gian Carlo See Bozzi, Silvio, (82k:03099)
- Meyer, Albert R. See Mayr, Ernst W., (82f:68061)
- Meyer, Robert K. See McRobbie, Michael A.; et al., (82h:03035)
- Myers, Dale See Lampe, William A., (82j:03033)
- Nagle, Michael C. The decidability of normal K5 logics. (82h:03019)
- Nakamura, Akira See Ono, Hiroakira, (82e:68102)
- Noah, Aris Predicate-functors and the limits of decidability in logic. (82h:03042)
- Norgela, S. On approximation of some classes of classical predicate calculus by decidable classes. II. (Russian. Lithuanian and English summaries) (82i:03015)
- Ono, Hiroakira (with Nakamura, Akira) Decidability results on a query language for data bases with incomplete information. (82e:68102)
- Oppen, Derek C. Reasoning about recursively defined data structures. (82a:68177)
- Schmerl, James Henry Decidability and finite axiomatizability of theories of N_0 -categorical partially ordered sets. (82h:03024)
- Seese, Detlef G. See Baudisch, Andreas; et al., (82i:03048)
- Singer, Michael F. Liouvillian solutions of n th order homogeneous linear differential equations. (82i:12028)
- Tamura, Saburo On the word problem for lo-semigroups. (82g:06026)
- Thistlewaite, Paul B. See McRobbie, Michael A.; et al., (82h:03035)
- Tucker, J. V. Computability and the algebra of fields: some affine constructions. (82a:03027)
- Tuschik, Hans-Peter See Baudisch, Andreas; et al., (82i:03048)
- Väänänen, Jouko See Anapolitanos, D. A., (82d:03059)
- Wasilewska, Anita On the Gentzen-type formalizations. (82g:03102)
- Weese, Martin See Baudisch, Andreas; et al., (82i:03048)
- Wolter, Helmut See Herre, Heinrich, (82c:03055)
- Zygmunt, Jan Notes on decidability and finite approximability of sentential logics. (82f:03024)

03B30 Foundations and axiomatics of classical theories

- Balzer, Wolfgang ★Empirische Geometrie und Raum-Zeit-Theorie in mengentheoretischer Darstellung. (German) [Empirical geometry and space-time theory in set-theoretic representation] 82i:03019
- Bostock, David ★Logic and arithmetic. Vol. II. 82h:03033
- (Davis, Lawrence H.) See Hazen, Allen, 82i:03020
- Hazen, Allen A correction: Davis's formulation of Kripke's theory of truth: "An alternate formulation of Kripke's theory of truth" [J. Philos. Logic 8 (1979), no. 3, 289–296; MR 80j:03020] by L. Davis. 82i:03020
- Katz, Michael L. Inexact geometry. 82c:03016
- Phakadze, S. S. Some questions of notation theory. (Russian) 82j:03009
- Seeland, Horst ★Algorithmische Theorien und konstruktive Geometrie. (German) [Algorithmic theories and constructive geometry] 82h:03034
- Thiel, Christian Bedeutungsvollständigkeit und verwandte Eigenschaften der logischen Systeme Freges. 82f:03011
- secondary classifications:
- Beck, Jon M. On the relationship between algebra and analysis. (82a:18005)
- Falmagne, Jean-Claude A probabilistic theory of extensive measurement. (82c:92030)
- Field, Harry H. ★Science without numbers. (82d:03008)
- Földes, Stéphane (with Singhi, N. M.) A nonconstructible projective plane. (82d:03052)
- Hansen, Hans Christian An axiomatic geometry with some important interpretations. (Danish) (82h:51021)
- Kusak, Eugeniusz A new approach to dimension-free affine geometry. (Russian summary) (82j:51004)
- MacKinnon, Edward Scientific realism: the new debates. (82m:03010)
- Materna, Pavel The set of empirical questions that can be answered by an empirical theory. (82d:03040)
- Singhi, N. M. See Földes, Stéphane, (82d:03052)
- Stenius, Erik On the definition of congruence by recursion. (82c:51017)
- Stojaković, Mirko D. On a formal language for group theory. (Serbo-Croatian. English summary) (82b:20003)
- Szmielew, Wanda Concerning the order and the semi-order of n -dimensional Euclidean space. (82d:51008)

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- Andrews, Peter B. Theorem proving via general matings. 82m:03013
- Cox, P. T. (with Pietrzykowski, T.) A complete, nonredundant algorithm for reversed Skolemization. 82c:03017
- Justen, K. A note on regular resolution. (German summary) 82h:03012
- Liu, Chu Chang The mechanical algorithm for solving Dedekind's problem. (Chinese. English summary) 82j:03010
- McRobbie, Michael A. (with Thistlewaite, Paul B.; Meyer, Robert K.) A mechanized decision procedure for nonclassical logics: the program KRIPKE. 82h:03035
- Meredith, David A positive logic proof procedure. 82a:03014
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- Orłowska, Ewa Resolution systems and their applications. I. 82i:03021a
- Resolution systems and their applications. II. 82i:03021b
- Pietrzykowski, T. See Cox, P. T., 82c:03017
- Siekman, Jörg (with Wrightson, Graham) Paramodulated connection graphs. 82h:03036
- Thistlewaite, Paul B. See McRobbie, Michael A.; et al., 82h:03035
- Wrightson, Graham See Siekman, Jörg, 82h:03036
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- Aronson, Alan R. (with Jacobs, Barry E.; Minker, Jack) A note on fuzzy deduction. (82g:03038)
- Billard, Brian Polynomial manipulation with APL. (82f:68042)
- Billsae, W. W. A maximal method for set variables in automatic theorem-proving. (82g:68089)
- Bullers, William L. (with Nof, Shimon Y.; Whinston, Andrew B.) Artificial intelligence in manufacturing planning and control. (82g:90055)
- Bundy, Alan (with Welham, Bob) Using meta-level inference for selective application of multiple rewrite rule sets in algebraic manipulation. (82h:68059)
- Erni, W. (with Lapsien, R.) On the time and tape complexity of weak unification. (82f:68047)
- Farat, V. M. See Koževnikova, G. P., (82g:68044)
- Huilot, Jean-Marie Canonical forms and unification. (82m:68067)
- Ibrahim, Rosalind L. R. A computer system for axiomatic investigation. (82j:68074)
- Jacobs, Barry E. See Aronson, Alan R.; et al., (82g:03038)
- Jirka, Petr Logical and linguistic aspects of computer-based inference processes. (82h:68124)
- Koževnikova, G. P. (with Farat, V. M.) Algorithms for translation of algebraic expressions into an improved parenthesis-free notation and an analysis of their effectiveness. (Russian) (82g:68044)
- Krakowski, Israel The four color problem reconsidered. (82a:03007)
- Lapsien, R. See Erni, W., (82f:68047)
- Lusk, E. L. See Winker, S. K.; et al., (82k:20103)
- Manna, Zohar (with Waldinger, Richard) A deductive approach to program synthesis. (82j:68094)
- Minker, Jack See Aronson, Alan R.; et al., (82g:03038)
- Nof, Shimon Y. See Bullers, William L.; et al., (82g:90055)
- Norwood, F. H. Long proofs. (82m:03002)
- Plaisted, David A. The application of multivariate polynomials to inference rules and partial tests for unsatisfiability. (82g:68045)
- Theorem proving with abstraction. (82m:68134)
- Sandford, David M. ★Using sophisticated models in resolution theorem proving. (82m:68135)

- Schwartz, Jacob T. Fast probabilistic algorithms for verification of polynomial identities. (82a:68078)
- Schwind, Camilla B. Natural language analysis by theorem proving methods: disambiguating pronouns in natural language texts. (82g:03045)
- Stickel, Mark E. A unification algorithm for associative-commutative functions. (82h:68123)
- Waldinger, Richard. See Manna, Zohar, (82g:68094)
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- Winker, S. K. (with Wos, L.; Lusk, E. L.) Semigroups, antiautomorphisms, and involutions: a computer solution to an open problem. I. (82k:20103)
- Wos, L. See Winker, S. K.; et al., (82k:20103)

03B40 Combinatory logic and λ -calculus

- Acezel, Peter (with Feferman, Solomon) Consistency of the unrestricted abstraction principle using an intensional equivalence operator. 82h:03037
- Barendregt, Henk (with Koymans, Karst) Comparing some classes of lambda calculus models. 82h:03038
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- Ben-Yelles, C. B. G-stratification is equivalent to F-stratification. 82i:03022
- Böhm, Corrado An abstract approach to (hereditary) finite sequences of combinators. 82h:03039
- Logic and computers. (See 82f:03002)
- Bunder, Martin W. The naturalness of illative combinatory logic as a basis for mathematics. 82a:03015
- Coppo, M. (with Dezani-Ciancaglini, M.; Venneri, B.) Principal type schemes and λ -calculus semantics. 82d:03022
- (with Dezani-Ciancaglini, M.) An extension of the basic functionality theory for the λ -calculus. 82d:03023
- (with Dezani-Ciancaglini, M.; Venneri, B.) Functional characters of solvable terms. 82j:03011
- Curry, Haskell B. Some philosophical aspects of combinatory logic. 82j:03012
- Dezani-Ciancaglini, M. See Coppo, M.; et al., 82d:03022; 82d:03023 and 82j:03011
- Feferman, Solomon. See Acezel, Peter, 82h:03037
- Fitch, Frederic B. An extension of a system of combinatory logic. 82g:03018
- A consistent combinatory logic with an inverse to equality. 82i:03023
- The consistency of system Q. 82g:03019
- Gandy, Robin Proofs of strong normalization. 82i:03024
- Kearns, John T. Fully explicit deductive systems. 82g:03020
- Klop, Jan Willem Reduction cycles in combinatory logic. 82h:03040
- Koymans, Karst. See Barendregt, Henk, 82h:03038
- Kuziřev, A. S. Sequential systems of λ -conversion and of combinatory logic. 82h:03041
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- Mitschke, Gerd Infinite terms and infinite reductions. 82g:03021
- Noah, Aris Predicate-functors and the limits of decidability in logic. 82h:03042
- Plotkin, Gordon D. Lambda-definability in the full type hierarchy. 82a:03016
- Pottinger, Garrel A type assignment for the strongly normalizable λ -terms. 82j:03014
- The Church-Rosser theorem for the typed λ -calculus with surjective pairing. 82j:03015
- Salle, Patrick Une généralisation de la théorie des types en λ -calcul. I. (English summary) 82f:03012a
- Une généralisation de la théorie des types en λ -calcul. II. (English summary) 82f:03012b
- Scott, Dana S. Lambda calculus: some models, some philosophy. 82d:03024
- Relating theories of the λ -calculus. 82d:03025
- Seldin, Jonathan P. Progress report on generalized functionality. 82a:03017
- Curry's program. 82j:03013
- Statman, Richard On the existence of closed terms in the typed λ -calculus. I. 82m:03014a
- On the existence of closed terms in the typed λ calculus. II. Transformations of unification problems. 82m:03014b
- Venneri, B. See Coppo, M.; et al., 82d:03022 and 82j:03011
- Wadsworth, Christopher P. Some unusual λ -calculus numeral systems. 82h:03043

secondary classifications:

- Aiello, Luigia (with Prini, Gianfranco) An efficient interpreter for the lambda-calculus. (82m:68061)
- Ashcroft, E. A. See Hennessy, M. C. B., (82a:68049)
- Astesiano, Egidio (with Costa, Gerardo) Sharing in nondeterminism. (82h:68006)
- Backus, John The algebra of functional programs: function level reasoning, linear equations, and extended definitions. (82j:68003)
- Bartnick, Jürgen ★Prädikatenlogik ohne gebundene Variablen. (German) [Predicate logic without bound variables] (82k:03010)
- Berry, Gérard On the definition of lambda-calculus models. (82h:68044)
- Bracho, Felipe Continuously generated fixed points in P_ω . (82c:06015)
- Costa, Gerardo See Astesiano, Egidio, (82h:68006)
- Diller, Justus Modified realization and the formulae-as-types notion. (82g:03093)
- Donahue, James On the semantics of "data type". (82f:68015)
- (Frege, Gottlob) See Potts, Timothy C., (82d:03004)
- Friedman, Joyce (with Warren, David S.) λ -normal forms in an intensional logic for English. (82k:03030)
- Hennessy, M. C. B. (with Ashcroft, E. A.) A mathematical semantics for a nondeterministic typed λ -calculus. (82a:68049)
- Howard, W. A. The formulae-as-types notion of construction. (82g:03094)
- Kozen, Dexter Semantics of probabilistic programs. (82i:68011)
- Kuziřev, A. A. (with Kuziřev, A. S.) The embedding of formal arithmetic in combinatorially complete systems. (Russian) (82k:03090)
- Kuziřev, A. S. See Kuziřev, A. A., (82k:03090)
- Meredith, David A positive logic proof procedure. (82a:03014)
- van der Mey, G. See van der Poel, W. L.; et al., (82a:68163)
- Mouloud, Noël Quelques hypothèses sur la porte des notions opératoires dans les langues naturelles et techniques. (82m:03041)
- O'Donnell, Michael A practical programming theorem which is independent of Peano arithmetic. (82i:03066)
- Pert, Jürgen Reachability homomorphisms on graphs. (German summary) (82h:68093)
- van der Poel, W. L. (with Schaap, C. E.; van der Mey, G.) New arithmetical operators in the theory of combinators. I, II, III. (82a:68163)
- Potts, Timothy C. "The grossest confusion possible?"—Frege and the lambda calculus. (82d:03004)
- Prini, Gianfranco See Aiello, Luigia, (82m:68061)
- Robinet, B. Les langages de Backus sont des systèmes de manipulation d'arbres. (82g:68018)
- (Rödding, Dieter) See Bartnick, Jürgen, (82k:03010)
- Schaap, C. E. See van der Poel, W. L.; et al., (82a:68163)
- (Scott, Dana S.) See Stoy, Joseph E., (82m:68003)
- Stoy, Joseph E. ★Denotational semantics: the Scott-Strachey approach to programming language theory. (82m:68003)
- Warren, David S. See Friedman, Joyce, (82k:03030)
- Williams, John H. Formal representations for recursively defined functional programs. (82j:68009)

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- Austin, David F. Plantinga on actualism and essences. 82i:03025
- Bailhache, P. Analytical deontic logic: authorities and addresses. 82k:03013
- Belnap, Nuel D., Jr. (with Gupta, Anil; Dunn, J. Michael) A consecutive [consecution] calculus for positive relevant implication with necessity. 82g:03022a
- Modal and relevance logics: 1977. (See 82f:03002)
- (with Gupta, Anil; Dunn, J. Michael) Correction: "A consecution calculus for positive relevant implication with necessity". 82g:03022b
- van Benthem, J. F. A. K. Syntactic aspects of modal incompleteness theorems. 82g:03023
- Some kinds of modal completeness. 82h:03044
- Berman, Francine A completeness technique for D-axiomatizable semantics. 82c:03018
- Bernini, Sergio A temporalization of modal semantics. 82d:03026
- Blue, N. A. A metalinguistic interpretation of counterfactual conditionals. 82j:03016
- Bode, James R. The possibility of a conditional logic. 82k:03014
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- Tanaka, Kokichi See Fukami, Satoru; et al., 82g:03039

- Wu, Xue Mou. See Zhu, Yuan Zhao, 82d:03037
- Yager, Ronald R. Some observations on probabilistic qualification in approximate reasoning. 82c:03032
- Zhu, Yuan Zhao (with Wu, Xue Mou) Pansystem analysis of dynamic yinyang logic and fuzziness. I. (Chinese. English summary) 82d:03037
- secondary classifications:
- Bhat, Kabekode V. S. Minimization of disjunctive normal forms of fuzzy logic functions. (82b:94050)
- Celyh, A. N. See Melihov, A. N.; et al., (82m:94074)
- Czogala, Ernest (with Pedrycz, Witold) Methods of multivalued logics and fuzzy set theory in computer-aided decision making in diagnostic and therapeutic processes. (Polish and Russian summaries) (82i:92004)
- Edmonds, Ernest A. Lattice fuzzy logics. (82b:03102)
- Gottwald, Siegfried Eine Anwendung des Formalismus der mehrwertigen Logik. (82b:03061)
- Hirota, Kaoru (with Iijima, Taizo) Logical basis in probabilistic set theory—probabilistic expression of ambiguity and subjectivity. (82i:94030)
- Iijima, Taizo See Hirota, Kaoru, (82i:94030)
- Kampé de Fériet, J. Une interprétation des mesures de plausibilité et de crédibilité au sens de G. Shafer et de la fonction d'appartenance définissant un ensemble flou de L. Zadeh. (82m:60003)
- Korovin, S. Ja. See Melihov, A. N.; et al., (82m:94074)
- Melihov, A. N. (with Korovin, S. Ja.; Celyh, A. N.) Some principles of program realization for fuzzy control algorithms. (Russian) (82m:94074)
- Peacocke, Christopher Are vague predicates incoherent? (82j:03005)
- Pedrycz, Witold See Czogala, Ernest, (82i:92004)
- Wu, Xue Mou Studies and applications of pansystems analysis. Ia. A brief survey of pansystems analysis. (Chinese) (82j:93002a)
- Studies and applications of pansystems analysis. Ib. A brief survey of pansystems analysis. (Chinese) (82j:93002b)
- Studies and applications of pansystems analysis. IV. Pansystem observability, pansystem logic and fuzziness. (Chinese. English summary) (82j:93002d)
- Pansystems analysis—a new exploration of interdisciplinary investigation. Studies and applications of pansystems analysis. III. (Chinese. English summary) (82j:93002c)
- Yager, Ronald R. An approach to inference in approximate reasoning. (82a:94135)
- Zadeh, Lotfi A. A fuzzy-algorithmic approach to the definition of complex or imprecise concepts. (82k:68021)

03B55 Intermediate logics

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- Homić, V. I. Separability of superintuitionistic propositional logic. (Russian) 82d:03039
- On the problem of separability for superintuitionistic propositional logics. (Russian) 82a:03023
- Janicka-Zuk, I. Finite axiomatization for some intermediate logics. 82g:03041
- Kabziński, Jacek K. (with Porębska, M.; Wroński, Andrzej) On the $\{\leftrightarrow, \sim\}$ -reduct of the intuitionistic consequence operation. 82c:03023
- Krzystek, Piotr S. Equivalential fragment of the infinite-valued logic of Łukasiewicz and the intermediate logics. 82b:03054
- Porębska, M. See Kabziński, Jacek K.; et al., 82c:03023
- Sehtman, V. B. Topological semantics of superintuitionistic logics. (Russian) 82d:03040
- Wroński, Andrzej On reducts of intermediate logics. 82c:03033
- See also Kabziński, Jacek K.; et al., 82c:03023
- secondary classifications:
- Hughes, G. E. Some extensions of the Brouwerian logic. (82d:03027)
- Mori, Sonoko Axiomatization of S4 type modal logics based on finite linear intermediate logics. (82b:03046)
- Popov, S. V. See Zahar'jačev, M. V., (82m:03022)
- Sallantin, Jean Langage, logique et observations. (82m:03039)
- Sehtman, V. B. Topological models of propositional logics. (Russian) (82d:03029)
- Zahar'jačev, M. V. (with Popov, S. V.) On the power of countermodels in intuitionistic calculus. (Russian) (82m:03022)

03B60 Other nonclassical logic

- Achtelik, Grażyna (with Dubikajtis, Lech; Dudek, Elżbieta; Konior, Jan) On independence of axioms of Jaśkowski's discursive propositional calculus. 82g:03042
- Alps, Robert A. (with Neveln, Robert C.) A predicate logic based on indefinite description and two notions of identity. 82f:03020
- Bunder, Martin W. A new hierarchy of paraconsistent logics. 82b:03055
- A note on quantified significance logics. 82d:03041
- Ciesielski, Krzysztof Generalized threshold logic. (Russian summary) 82i:03035
- Domotor, Zoltan Probability kinematics and representation of belief change. 82c:03034
- Dubikajtis, Lech See Achtelik, Grażyna; et al., 82g:03042
- Dudek, Elżbieta See Achtelik, Grażyna; et al., 82g:03042
- Goodman, Nicolas D. The logic of contradiction. 82d:03043
- Halkowska, Katarzyna ★Algebry związane z teoriami zawierającymi definicje warunkowe. (Polish) [Algebras connected with theories having conditional definitions] 82h:03020
- Hendry, Herbert E. (with Roper, James E.) Anything confirms anything? 82b:03056
- Konior, Jan See Achtelik, Grażyna; et al., 82g:03042
- Loparić, Andrija See Routley, Richard, 82g:03044
- Mirkowska, Grażyna Model existence theorem in algorithmic logic with nondeterministic programs. 82c:03024
- Mortensen, Chris Every quotient algebra for C_1 is trivial. 82b:03057
- Nagai, Shigeo (with Okubo, Tokuyuki) On the logic of a priori modalities. 82b:03058

- Neveln, Robert C. See Alps, Robert A., 82f:03020
- Okubo, Tokuyuki See Nagai, Shigeo, 82b:03058
- Onyia, Mieczysław Propositional quantifiers in non-Fregean theories. 82c:03035
- Pinter, Charles The logic of inherent ambiguity. 82b:03059
- Roper, James E. See Hendry, Herbert E., 82b:03056
- Routley, Richard (with Loparić, Andrija) Semantics for quantified relevant logics without replacement. 82g:03044
- von Wright, Georg Henrik Explanation and understanding of action. 82k:03028

secondary classifications:

- Andréka, Hajnal (with Németi, István; Sain, Ildikó) Program verification within and without logic. (82b:68005)
- Aprile, Giuseppe A modal inferential calculus with two levels. (Italian) (82m:03042b)
- Bates, Diderik A completeness-proof method for extensions of the implicational fragment of the propositional calculus. (82b:03030)
- (Bolzano, Bernard) See Fedorov, B. I., (82c:03003)
- Cohen, L. Jonathan Inductive logic, 1945–1977. (See 82f:03002)
- Fedorov, B. I. ★Логика Бернарда Больцано. (Russian) [Logic of Bernard Bolzano] (82c:03003)
- Genrich, H. J. (with Lautenbach, K.; Thiagarajan, P. S.) Elements of general net theory. (82a:68112)
- Haldén, Sören ★The foundations of decision logic. (82k:90005)
- Hendry, Herbert E. Two remarks on the atomistic calculus of individuals. (82b:03109)
- Hottos, Gilbert Logique déontique et logique de l'action chez G. H. von Wright. (82k:03016)
- Lautenbach, K. See Genrich, H. J.; et al., (82a:68112)
- Liu, Guo Han Some transforming relations among the pansystem logic spaces with soft algebra shadow system. (Chinese. English summary) (82j:03030)
- McRobbie, Michael A. (with Thistlewaite, Paul B.; Meyer, Robert K.) A mechanized decision procedure for nonclassical logics: the program KRIPKE. (82b:03035)
- Meyer, Robert K. See McRobbie, Michael A.; et al., (82b:03035)
- Muravikii, A. Ju. Finite approximability of the calculus I^A and the nonmodelability of some of its extensions. (Russian) (82m:03018)
- Németi, István See Andréka, Hajnal; et al., (82b:68005)
- Sain, Ildikó See Andréka, Hajnal; et al., (82b:68005)
- Thiagarajan, P. S. See Genrich, H. J.; et al., (82a:68112)
- Thistlewaite, Paul B. See McRobbie, Michael A.; et al., (82b:03035)
- Urchs, Max Peter Kripke-style semantics for Jaśkowski's system Q_1 . (82g:03030)
- Wuttich, Klaus Fragen des Psychologismus in der epistemischen Logik. (82b:03023)

03B65 Logic of natural languages [See also 68Fxx.]

- Åqvist, Lennart Predicate calculi with adjectives and nouns. 82b:03060
- Duridanov, I. Zur logischen Charakteristik der grammatischen Kategorien. (See 82c:03006)
- van Emde Boas, Peter (with Janssen, Theo M. V.) The impact of Frege's principle of compositionality for the semantics of programming and natural languages. 82k:03029
- Friedman, Joyce (with Warren, David S.) λ -normal forms in an intensional logic for English. 82k:03030
- Gladkii, A. V. The meaning of the conjunction "or". (Russian) 82c:03036
- (Groenendijk, Jeroen A. G.) See Formal methods in the study of language, 82k:03031
- Hintikka, Jaakko "Is", semantical games, and semantical relativity. 82b:03061
- (with Saarinen, Esa) Information-seeking dialogues: some of their logical properties. 82d:03042
- Janssen, Theo M. V. See van Emde Boas, Peter, 82k:03029 and Formal methods in the study of language, 82k:03031
- Materna, Pavel The set of empirical questions that can be answered by an empirical theory. 82d:03040
- ter Meulen, Alice An intensional logic for mass terms. 82j:03031
- Mouloud, Noël Quelques hypothèses sur la porte des notions opératoires dans les langues naturelles et techniques. 82m:03041
- Pizzi, Claudio 'Since', 'even if', 'as if'. 82d:03043
- Saarinen, Esa See Hintikka, Jaakko, 82d:03042
- Schwind, Camilla B. Natural language analysis by theorem proving methods: disambiguating pronouns in natural language texts. 82g:03045
- Starčenko, A. A. (with Volčenko, M. V.) Semantics of questions in natural language. (Russian) 82d:03044
- (Stokhof, Martin B. J.) See Formal methods in the study of language, 82k:03031
- Volčenko, M. V. See Starčenko, A. A., 82d:03044
- Warren, David S. See Friedman, Joyce, 82k:03029
- Amsterdam ★Formal methods in the study of language. Part 1. 82k:03031a
- ★Formal methods in the study of language. Part 2. 82k:03031b
- Colloquium:
- Amsterdam, Formal Methods in the Study of Language ★Formal methods in the study of language. Part 1. 82k:03031a
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- Formal methods in the study of language ★Formal methods in the study of language. Part 1. 82k:03031a
- ★Formal methods in the study of language. Part 2. 82k:03031b

secondary classifications:

- Cleave, John P. Some remarks on the interpretation of 3-valued logics. (82g:03035)
- Cresswell, M. J. Quotational theories of propositional attitudes. (82h:03005)
- (Horecký, Ján) See Prague studies in mathematical linguistics, (82m:03005)
- (Machek, Josef) See Prague studies in mathematical linguistics, (82m:03005)
- Nishimura, Hirokazu Interval logics with applications to study of tense and aspect in English. (82k:03021)
- Palme, Johannes Sinn, Bedeutung, Wert—grundlegende Elemente der Formalisierung von Sprachen. (82c:03010)

- (Těšitelová, Marie) See *Prague studies in mathematical linguistics*, (82m:03005)
 Vanderveken, Daniel A strong completeness theorem for pragmatics. (82h:03018)
 Zielonka, Wojciech Axiomatizability of Ajdukiewicz-Lambek calculus by means of cancellation schemes. (82h:68107)
Prague studies in mathematical linguistics ★ *Prague studies in mathematical linguistics*. 7. (82m:03005)

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- Aprile, Giuseppe Inferential graphs for problems in logic with identity. (Italian) 82m:03042a
 A modal inferential calculus with two levels. (Italian) 82m:03042b
 Bernert, Jan The strongly adequate matrices of the form of product of Lindenbaum's matrices. 82c:03037
 Biela, Andrzej (with Stepień, Teodor) Lindenbaum's extensions. 82f:03021
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 Bunder, Martin W. Modus ponens free (implicational) logics. 82f:03022
 Clarke, Bowman L. A calculus of individuals based on "connection". 82i:03036
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 Massey, Gerald J. Logic and linguistics. (See 82f:03002)
 Močenskii, V. A. A decreasing sequence of propositional calculi with deduction of increased complexity. 82f:03023
 Stepień, Teodor See Biela, Andrzej, 82f:03021
 Waragai, Toshiharu The ontological law of contradiction and its logical structure. 82m:03043
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 Mutual interpretability of sentential logic. I. 82h:03033a
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 Wolniewicz, Bogusław On the lattice of elementary situations. 82g:03047
 Wybraniec-Skardowska, Ursula On the theory of labels-tokens. 82c:03026
 Zygmunt, Jan Notes on decidability and finite approximability of sentential logics. 82f:03024

secondary classifications:

- de Carvalho, Roberto Lins (with Veloso, Paulo Augusto S.) Towards a logic of limited perception. (82c:68013)
 Czelakowski, Janusz ★ *Model-theoretic methods in methodology of propositional calculi*. (82c:03046)
 Dańko, Wiktor Definability in algorithmic logic. (82f:68031)
 Fomina, N. I. See Kaliničenko, L. A., (82g:68021)
 Hawranek, Jacek A matrix adequate for S5 with MP and RN. (82c:03019)
 Kabziński, Jacek K. (with Porębska, M.; Wroński, Andrzej) On the (\leftrightarrow, \sim) -reduct of the intuitionistic consequence operation. (82c:03023)
 Kaliničenko, L. A. (with Fomina, N. I.) A method of syntactic analysis of constructions of a predicate logic language in data base control systems. (Russian) (82g:68021)
 Moore, Daniel J. (with Russell, Bruce) Axiomatic data type specifications: a first order theory of linear lists. (82j:68007)
 Porębska, M. See Kabziński, Jacek K.; et al., (82c:03023)
 Rasiowa, Helena Algorithmic logic and its extensions, a survey. (82m:68029)
 Russell, Bruce See Moore, Daniel J., (82j:68007)
 (Stepanenko, E. N.) See *Questions of the application of computers in the development and investigation of technical systems*, (82g:68007)
 Veloso, Paulo Augusto S. See de Carvalho, Roberto Lins, (82c:68013)
 Wroński, Andrzej See Kabziński, Jacek K.; et al., (82c:03023)
 Zielonka, Wojciech Axiomatizability of Ajdukiewicz-Lambek calculus by means of cancellation schemes. (82h:68107)
 Questions of the application of computers in the development and investigation of technical systems ★ *Вопросы применения ЭВМ при разработке и исследовании технических систем*. (Russian) [Questions of the application of computers in the development and investigation of technical systems] (82g:68007)

03Cxx Model theory

- Macintyre, Angus Model theory. (See 82f:03002)

secondary classifications:

- Beljaev, V. Ja. (with Taiclin, M. A.) Elementary properties of existentially closed systems. (Russian) (82a:03028)
 Taiclin, M. A. See Beljaev, V. Ja., (82a:03028)
 Brussels ★ *Proceedings of the Model Theory Meeting*. (82c:03008)
 Meeting:
 Model Theory ★ *Proceedings of the Model Theory Meeting*. (82c:03008)

- Model theory ★ *Proceedings of the Model Theory Meeting*. (82c:03008)
 Mons ★ *Proceedings of the Model Theory Meeting*. (82c:03008)
 Proceedings:
 Model Theory Meeting ★ *Proceedings of the Model Theory Meeting*. (82c:03008)

03C05 Equational classes, universal algebra [See also 08Axx.]

secondary classifications:

- Andréka, Hajnal (with Némethi, István) HSPK is equational class, without the axiom of choice. (82h:03081)
 Bairamov, R. A. (with Mamedov, O. M.) Σ -subdirect representations in axiomatizable classes. (Russian. Azerbaijani and English summaries) (82c:08011)
 Baldwin, John T. The number of subdirectly irreducible algebras in a variety. II. (82c:08008)
 Burris, Stanley Free algebras as subdirect products. (82c:08012)
 Cohn, P. M. ★ *Universal algebra*. (82j:08001)
 Driobak, Wiesław On infinite subdirectly irreducible algebras in locally finite equational classes. (82m:08009)
 Ésik, Zoltán Identities in iterative and rational algebraic theories. (82i:08004)
 Földes, Stéphane (with Sabidussi, Gert) Recursive undecidability of the binding property for finitely presented equational classes. (82c:08007)
 Heideima, J. (with Malan, S. W.) Congruences on relational structures. (See 82i:16002)
 Hodges, Wilfrid Functorial uniform reducibility. (82c:03030)
 Kaiser, Klaus Lattices acting on universal classes. (82j:03080)
 Kolganov, N. A. Identities in an algebra of recursive functions. (Russian) (82d:03067)
 Malan, S. W. See Heideima, J., (See 82i:16002)
 Mamedov, O. M. See Bairamov, R. A., (82c:08011)
 McNulty, George F. Classes which generate the variety of all lattice-ordered groups. (82c:06031)
 Némethi, István See Andréka, Hajnal, (82h:03081)
 Plonka, Jerzy On lattices of congruences of relational systems and universal algebras. (82h:08002)
 Sabidussi, Gert See Földes, Stéphane, (82c:08007)

03C07 Basic properties of first-order languages and structures.

secondary classifications:

- Cohn, P. M. ★ *Universal algebra*. (82j:08001)

03C10 Quantifier elimination and related topics

- Berline, Chantal Elimination of quantifiers for nonsemisimple rings of characteristic p . 82h:03034
 Rings which admit elimination of quantifiers. 82d:03046
 van den Dries, Lou Quantifier elimination for linear formulas over ordered and valued fields. 82h:03035
 Eršov, Ju. L. Eliminability of quantifiers in regularly closed fields. (Russian) 82h:03036
 Goltz, Hans-Joachim Untersuchungen zur Elimination verallgemeinerter Quantoren in Körpertheorien. (English, Russian and French summaries) 82j:03032
 Prest, Mike Quantifier elimination for modules. 82i:03037
 Weispfenning, Volker Elimination of quantifiers for certain ordered and lattice-ordered abelian groups. 82h:03022
 secondary classifications:
 Benda, Miroslav Modeloids. I. (82g:08002)
 Boffa, M. (with Macintyre, Angus; Point, Françoise) The quantifier elimination problem for rings without nilpotent elements and for semisimple rings. (82d:03054)
 Cegielski, Patrick La théorie élémentaire de la multiplication. (English summary) (82d:03020)
 Cowles, John R. Generalized Archimedean fields and logics with Malitz quantifiers. (82h:03032)
 Heindorf, Lutz Comparing the expressive power of some languages for Boolean algebras. (82m:03050)
 Hendry, Herbert E. Two remarks on the atomistic calculus of individuals. (82h:03109)
 Lachlan, A. H. (with Woodrow, Robert E.) Countable ultrahomogeneous undirected graphs. (82c:05083)
 Macintyre, Angus See Boffa, M.; et al., (82d:03054)
 Point, Françoise Élimination des quantificateurs dans les L -anneaux \ast -réguliers et application aux anneaux biréguliers. (82h:03028)
 See also Boffa, M.; et al., (82d:03054)
 Rose, Bruce I. (with Woodrow, Robert E.) Ultrahomogeneous structures. (82c:03044)
 Woodrow, Robert E. See Rose, Bruce I., (82c:03044) and Lachlan, A. H., (82c:05083)

03C13 Finite models

secondary classifications:

- Lovász, László Efficient algorithms: an approach by formal logic. (82c:68042)
 Zil'ber, B. I. Solution of the problem of finite axiomatizability for theories that are categorical in all infinite powers. (Russian) (82g:03051)

03C15 Denumerable models

- Miller, Arnold W. Vaught's conjecture for theories of one unary operation. 82m:03044
 Peretjat'kin, M. G. A theory with three countable models. (Russian) 82g:03048
 Pillay, Anand \aleph_1 -categoricity in regular subsets of $L_{\omega_1\omega}$. 82d:03047
 Rodríguez Artalejo, Mario Eine syntaktisch-algebraische Methode zur Konstruktion von Modellen. 82c:03027

secondary classifications:

Millar, Terrence Vaught's theorem recursively revisited. (82d:03053)

03C20 Ultraproducts and related constructions

- Hirschfeld, Joram Generalized ultrapowers. 82b:03067
 Hodges, Wilfrid (with Shelah, Saharon) Infinite games and reduced products. 82f:03025
 Jovanović, Aleksandar Ultraproducts of well orders. 82i:03038
 Koppelberg, Bernd Ultrapowers and Boolean ultrapowers of ω and ω_1 . 82d:03048
 Parnigiani Bedogna, Daniela The SH formulas in reduced generalized powers. (Italian. English summary) 82h:03023
 Shelah, Saharon See Hodges, Wilfrid, 82f:03025
 Takahashi, Makoto Topological powers and reduced powers. 82c:03040

secondary classifications:

- Bankston, Paul Topological reduced products via good ultrafilters. (82g:54017)
 Barone, E. (with Giannone, Alberto; Scozzafava, Romano) On some aspects of the theory and applications of finitely additive probability measures. (82f:28001)
 Bernardi, Claudio The dual space of a product of Boolean algebras and the Stone compactifications. (Italian. English summary) (82i:06018)
 Giannone, Alberto See Barone, E.; et al., (82f:28001)
 Heinrich, Stefan Ultraproducts in Banach space theory. (82b:46013)
 Imazeki, Kinji Characterizations of compact operators and semi-Fredholm operators. (82g:47011)
 Pinus, A. G. The spectrum of rigid systems of Horn classes. (Russian) (82k:03044)
 Raynaud, Yves Deux nouveaux exemples d'espaces de Banach stables. (English summary) (82k:46026a)
 Espaces de Banach superstables. (English summary) (82k:46026b)
 Scozzafava, Romano See Barone, E.; et al., (82f:28001)
 Ziegler, Martin Algebraisch abgeschlossene Gruppen. (English summary) (82b:20004)

03C25 Model-theoretic forcing

- Lablanquie, Jean-Claude Modèles premiers et modèles génériques. (English summary) 82e:03028
 Sette, Antonio-Mario Fraïssé and Robinson's forcing. 82i:03039

secondary classifications:

- Bruce, Kim B. Model constructions in stationary logic. I. Forcing. (82f:03032)
 Glass, A. M. W. (with Pierce, Keith R.) Equations and inequations in lattice-ordered groups. (82c:06030)
 Pierce, Keith R. See Glass, A. M. W., (82c:06030)

03C30 Other model constructions

- Ball, Richard N. Cauchy completions are homomorphic images of submodels of ultrapowers. 82c:03041
 Burris, Stanley (with Werner, Heinrich) Sheaf constructions and their elementary properties. 82d:03049
 Lampe, William A. (with Myers, Dale) Elementary properties of free extensions. 82j:03033
 Miraglia, Francisco Relations between structures of stable continuous functions and filtered powers. 82g:03049
 Myers, Dale See Lampe, William A., 82j:03033
 Werner, Heinrich See Burris, Stanley, 82d:03049

secondary classifications:

- Rodriguez Artalejo, Mario Eine syntaktisch-algebraische Methode zur Konstruktion von Modellen. (82e:03027)

03C35 Categoricity and completeness of theories

- Corcoran, John Categoricity. 82j:03034
 Eršov, Ju. L. Regularly closed fields. (Russian) 82g:03050
 Givant, Steven Union decompositions and universal classes categorical in power. 82c:03042
 Mycielski, Jan (with Perlmutter, Paul) Model completeness of some metric completions of absolutely free algebras. 82k:03037
 Omarov, B. Ranks and Deg of countable ω_0 -categorical theories. (Russian) 82e:03029
 Paljutin, E. A. Categorical Horn classes. I. (Russian) 82k:03038
 A description of categorical positive Horn classes. (Russian) 82k:03039
 Peretjat'kin, M. G. Example of an ω_1 -categorical complete finitely axiomatizable theory. (Russian) 82j:03035
 Perlmutter, Paul See Mycielski, Jan, 82k:03037
 Schmerl, James Henry Decidability and finite axiomatizability of theories of N_0 -categorical partially ordered sets. 82h:03024
 Zil'ber, B. I. Solution of the problem of finite axiomatizability for theories that are categorical in all infinite powers. (Russian) 82g:03051
 Strongly minimal countably categorical theories. (Russian) 82c:03043

secondary classifications:

- Baizhanov, B. S. Some properties of totally transcendental theories. (Russian) (82e:03031)
 Spectral questions of totally transcendental theories of finite rank. (Russian) (82f:03026)
 Basarab, Șerban A. Some model theory for Henselian valued fields. (82m:03046)
 Haussler, David Model completeness of an algebra of languages. (82k:03048)

- Jacob, Bill The model theory of generalized real closed fields. (82m:03047)
 Kiersstead, Henry A. Countable models of ω_1 -categorical theories in admissible languages. (82c:03054)
 Kudalberginov, K. Z. Constructivizable models of undecidable theories. (Russian) (82h:03040)
 Lachlan, A. H. Singular properties of Morley rank. (82e:03033)
 Lascar, D. Généralisation de l'ordre de Rudin-Keisler aux types d'une théorie. (82a:03024)
 Pillay, Anand N_0 -categoricity in regular subsets of $L_{\omega_1, \omega}$. (82d:03047)
 Rosenthal, John W. On the dimension theory of N_1 -categorical theories with the nontrivial strong elementary intersection property. (82e:03035)
 Shelah, Saharon On the number of nonisomorphic models of cardinality λ $L_{\omega, \omega}$ -equivalent to a fixed model. (82k:03054)
 Zil'ber, B. I. Totally categorical theories: structural properties and the nonfinite axiomatizability. (82m:03045)

03C40 Interpolation and preservation theorems; definability

- Hodges, Wilfrid Functorial uniform reducibility. 82e:03030

secondary classifications:

- Caicedo Ferrer, Xavier On extensions of $L_{\omega, \omega}(Q_1)$. (82b:03071)
 Knight, Julia F. Algebraic independence. (82d:03050)
 de Lavallette, G. R. Renardel The interpolation theorem in fragments of logics. (82d:03019)
 Malinowski, Grzegorz (with Michalczyk, Marek) Interpolation properties for a class of many-valued propositional calculi. (82g:03037)
 Michalczyk, Marek See Malinowski, Grzegorz, (82g:03037)
 Mundici, Daniele An algebraic result about soft model theoretical equivalence relations with an application to H. Friedman's fourth problem. (82k:03056)
 Rogers, Pat Preservation of saturation and stability in a variety of nilpotent groups. (82k:20003)
 Takahashi, Makoto Topological powers and reduced powers. (82c:03040)

03C45 Stability and related concepts

- Baizhanov, B. S. Some properties of totally transcendental theories. (Russian) 82e:03031
 Spectral questions of totally transcendental theories of finite rank. (Russian) 82f:03026
 Baldwin, John T. Definability and the hierarchy of stable theories. 82i:03040
 Bekenov, M. I. Theories with a basis. (Russian) 82h:03025
 (with Mustafin, T. G.) Properties of nonsplit types in stable theories. (Russian) 82i:03041
 Belegradec, O. V. Unstable group theories. (Russian) 82f:03027
 Chatzidakis, Zoé Forking et rangs locaux selon Shelah. 82g:03052
 Erimbetov, M. M. A property of countable stable theories. (Russian) 82e:03032
 Hodges, Wilfrid Encoding orders and trees in binary relations. 82k:03040
 Lachlan, A. H. Singular properties of Morley rank. 82e:03033
 Lascar, D. Généralisation de l'ordre de Rudin-Keisler aux types d'une théorie. 82a:03024
 Mustafin, T. G. Principles of normalization of formulas. (Russian) 82e:03034
 See also Bekenov, M. I., 82i:03041
 Pillay, Anand Prime models over subsets. 82k:03041
 Number of models of theories with many types. 82k:03042
 Poizat, Bruno Exercices en stabilité. 82g:03053
 Modèles premiers d'une théorie totalement transcendente. 82e:03042
 Sous-groupes définissables d'un groupe stable. 82g:03054
 See also Study Group: Stable Theories (Bruno Poizat), 82f:03028
 Shelah, Saharon Simple unstable theories. 82g:03055
 Zil'ber, B. I. Totally categorical theories: structural properties and the nonfinite axiomatizability. 82m:03045
 Stable theories ★Groupe d'Étude Théories Stables (Bruno Poizat). 2e année: 1978/79. (French) [Study Group on Stable Theories (Bruno Poizat). Second year: 1978/79] 82f:03028
 Study Group:
 Stable Theories (Bruno Poizat) ★Groupe d'Étude Théories Stables (Bruno Poizat). 2e année: 1978/79. (French) [Study Group on Stable Theories (Bruno Poizat). Second year: 1978/79] 82f:03028

secondary classifications:

- Ash, C. J. (with Nerode, Anil) Functorial properties of algebraic closure and Skolemization. (82m:12014)
 Cherlin, Gregory (with Shelah, Saharon) Superstable fields and groups. (82c:03045)
 Delon, Françoise Types sur $Cl(X)$. (82i:03044)
 Garavaglia, Steven Forking in modules. (82g:03059)
 Meirembekov, K. A. Remarks on theories with a bounded spectrum. (Russian) (82e:03048)
 Nerode, Anil See Ash, C. J., (82m:12014)
 Omarov, B. Ranks and Deg of countable ω_0 -categorical theories. (Russian) (82e:03029)
 Paljutin, E. A. Categorical Horn classes. I. (Russian) (82k:03038)
 Rogers, Pat Preservation of saturation and stability in a variety of nilpotent groups. (82k:20003)
 Shelah, Saharon Independence results. (82h:03099)
 See also Cherlin, Gregory, (82c:03045)

03C50 Models with special properties (saturated, rigid, etc.)

- Anapolitanos, D. A. Cyclic indiscernibles and Skolem functions. 82k:03043
 Fujiwara, Tsuyoshi Existentially closed structures and algebraically closed structures. (See 82f:20008)

- Knight, Julia F.** Algebraic independence. **82d:03050**
Pinas, A. G. The spectrum of rigid systems of Horn classes. (Russian) **82k:03044**
Rose, Bruce I. (with Woodrow, Robert E.) Ultrahomogeneous structures. **82c:03044**
Rosenthal, John W. On the dimension theory of N_1 -categorical theories with the nontrivial strong elementary intersection property. **82c:03035**
Wilmsers, George Minimally saturated models. **82d:03051**
Woodrow, Robert E. See **Rose, Bruce I.** **82c:03044**
Zeithor, Horst Die Amalgamierungseigenschaft und reine Ringe. **82j:03036**

secondary classifications:

- Bekenov, M. I.** (with Mustafin, T. G.) Properties of nonsplit types in stable theories. (Russian) **(82i:03041)**
Drobotun, B. N. See **Gončarov, S. S.** **(82i:03068)**
Dzgoev, V. D. See **Gončarov, S. S.** **(82g:03082)**
Georgescu, George On a polyadic version of the omitting types theorem. (Romanian. English summary) **(82m:03069)**
Gončarov, S. S. Strong constructivizability of homogeneous models. (Russian) **(82a:03026)**
 (with Dzgoev, V. D.) Autostability of models. (Russian) **(82g:03082)**
 (with Drobotun, B. N.) Numerations of saturated and homogeneous models. (Russian) **(82i:03068)**
Mustafin, T. G. See **Bekenov, M. I.** **(82i:03041)**
Shelah, Saharon Simple unstable theories. **(82g:03055)**

03C52 Properties of classes of models

- Ferro, Alfredo** (with Micale, Biagio) On models of a first-order theory in which certain formulas define a model of another theory. (Italian. English summary) **82i:03043**
Micale, Biagio See **Ferro, Alfredo**. **82i:03043**
Németi, István From hereditary classes to varieties in abstract model theory and partial algebra. **82a:03025**

secondary classifications:

- Caicedo Ferrer, Xavier** The subdirect decomposition theorem for classes of structures closed under direct limits. **(82c:08001)**
Kaiser, Klaus On a lattice of relational reducts. **(82d:06010)**
Oikkonen, Juha On PC- and RPC-classes in generalized model theory. **(82d:03064)**
Pinas, A. G. The spectrum of rigid systems of Horn classes. (Russian) **(82k:03044)**

03C55 Set-theoretic model theory

- Mustafin, T. G.** Theories with a two-cardinal formula. (Russian) **82k:03045**

secondary classifications:

- Koppelberg, Bernd** Ultrapowers and Boolean ultrapowers of ω and ω_1 . **(82d:03048)**
Kueker, David W. $L_{\omega_1\omega_1}$ elementarily equivalent models of power ω_1 . **(82k:03052)**
Malitz, J. (with Rubin, Matatyahu) Compact fragments of higher order logic. **(82k:03055)**
Rubin, Matatyahu See **Malitz, J.** **(82k:03055)**
Shelah, Saharon On the number of nonisomorphic models of cardinality λ $L_{\omega_1\omega_1}$ -equivalent to a fixed model. **(82k:03054)**

03C57 Recursion-theoretic model theory [See also 03D45.]

- Földes, Stéphane** (with Singhi, N. M.) A nonconstructible projective plane. **82d:03052**
Gončarov, S. S. Strong constructivizability of homogeneous models. (Russian) **82a:03026**
 The problem of the number of nonautoequivalent constructivizations. (Russian) **82k:03046**
Millar, Terrence Vaught's theorem recursively revisited. **82d:03053**
Remmel, Jeffrey B. Recursively categorical linear orderings. **82j:03037**
Singhi, N. M. See **Földes, Stéphane**. **82d:03052**
Tucker, J. V. Computability and the algebra of fields: some affine constructions. **82a:03027**

secondary classifications:

- Dobrica, V. P.** Constructivizable abelian groups. (Russian) **(82i:03058)**
Eršov, Ju. L. ★Проблемы разрешимости и конструктивные модели. (Russian) [Decision problems and constructivizable models] **(82k:03009)**
Karr, Michael Summation in finite terms. **(82m:12018)**
Kudaibergenov, K. Ž. Constructivizable models of undecidable theories. (Russian) **(82k:03040)**
Masurjan, A. S. On the class of primitive recursive functions definable on finite models. (Russian. Armenian summary) **(82i:03052)**
Rodríguez Artalejo, Mario Eine syntaktisch-algebraische Methode zur Konstruktion von Modellen. **(82c:03027)**
Smoryński, Craig (with Stavi, J.) Cofinal extension preserves recursive saturation. **(82g:03062)**
 Cofinal extensions of nonstandard models of arithmetic. **(82g:03063)**
 Elementary extensions of recursively saturated models of arithmetic. **(82g:03064)**
Stavi, J. See **Smoryński, Craig**. **(82g:03062)**

03C60 Model-theoretic algebra [See also 08C10.]

- Basarab, Șerban A.** Some model theory for Henselian valued fields. **82m:03046**
 (with Nica, Vasile; Popescu, Dorin) Approximation properties and existential completeness for ring morphisms. **82k:03047**
Baudisch, Andreas The elementary theory of abelian groups with m -chains of pure

subgroups. **82h:03026**

- Baur, Walter** On the elementary theory of quadruples of vector spaces. **82g:03056**
Beljaev, V. Ja. (with Taiclin, M. A.) Elementary properties of existentially closed systems. (Russian) **82a:03028**
Boffa, M. (with Macintyre, Angus; Point, Françoise) The quantifier elimination problem for rings without nilpotent elements and for semisimple rings. **82d:03054**
Bouscaren, Elisabeth Existentially closed modules: types and prime models. **82j:03038**
Cherlin, Gregory (with Shelah, Saharon) Superstable fields and groups. **82c:03045**
 (with van den Dries, Lou; Macintyre, Angus) Decidability and undecidability theorems for PAC-fields. **82g:03057**
Czelakowski, Janusz ★Model-theoretic methods in methodology of propositional calculi. **82c:03046**
Delon, Françoise Hensel fields in equal characteristic $p > 0$. **82g:03058**
 Types sur $C((X))$. **82i:03044**
van den Dries, Lou New decidable fields of algebraic numbers. **82h:03027**
 See also **Cherlin, Gregory**; et al., **82g:03057**
Felgner, Ulrich Horn theories of abelian groups. **82d:03055**
Garavaglia, Steven Forking in modules. **82g:03059**
Gurevich, Yuri (with Holland, W. Charles) Recognizing the real line. **82g:03060**
Hausser, David Model completeness of an algebra of languages. **82k:03048**
Hodges, Wilfrid Interpreting number theory in nilpotent groups. **82c:03047**
 Constructing pure injective hulls. **82a:03029**
Holland, W. Charles See **Gurevich, Yuri**. **82g:03060**
Jacob, Bill The model theory of "R-formal" fields. **82h:03068**
 The model theory of generalized real closed fields. **82m:03047**
Kim, Kukjin On the structure of Hensel fields. **82a:03030**
Komarnik, M. Ja. Axiomatizability of certain classes of modules connected with a torsion. (Russian) **82a:03031**
Lacava, Francesco Observations on the theory of lattice-ordered abelian groups. (Italian. English summary) **82a:03032**
Lisovik, L. P. Sets that are expressible in theories of commutative semigroups. (Russian. English summary) **82j:03039**
Macintyre, Angus See **Boffa, M.**; et al., **82d:03054** and **Cherlin, Gregory**; et al., **82g:03057**
Meirembekov, K. A. Remarks on theories with a bounded spectrum. (Russian) **82d:03048**
Murzina, F. A. Elementary equivalence of rings of continuous functions. (Russian) **82c:03049**
Nica, Vasile See **Basarab, Șerban A.**; et al., **82k:03047**
Podewski, K.-P. (with Reineke, J.) On algebraically closed commutative indecomposable rings. **82c:03050**
Point, Françoise Élimination des quantificateurs dans les L -anneaux \ast -réguliers et application aux anneaux biréguliers. **82h:03028**
 See also **Boffa, M.**; et al., **82d:03054**
Popescu, Dorin See **Basarab, Șerban A.**; et al., **82k:03047**
Reineke, J. See **Podewski, K.-P.** **82c:03050**
Shelah, Saharon See **Cherlin, Gregory**. **82c:03045**
Taiclin, M. A. See **Beljaev, V. Ja.** **82a:03028**
Toffalori, Carlo Sheaves of pairs of real closed fields. **82m:03048**

secondary classifications:

- Andréka, Hajnal** (with Németi, István) Dimension-complemented and locally finite-dimensional cylindric algebras are elementarily equivalent. **(82j:03081)**
Ash, C. J. (with Nerode, Anil) Functorial properties of algebraic closure and Skolemization. **(82m:12014)**
Basarab, Șerban A. Model-theoretic methods in the theory of Henselian-valued fields. (Romanian. English summary) **(82i:12034)**
 Model-theoretic methods in the theory of Henselian-valued fields. II. (Romanian. English summary) **(82i:12035)**
Baudisch, Andreas (with Seese, Detlef G.; Tuschik, Hans-Peter; Weese, Martin) ★Decidability and generalized quantifiers. **(82i:03048)**
 The theory of abelian p -groups with the quantifier I is decidable. **(82g:03068)**
Becker, Joseph A. (with Lipshitz, Leonard) Remarks on the elementary theories of formal and convergent power series. **(82i:14004a)**
 (with Lipshitz, Leonard) Errata to the paper: "Remarks on the elementary theories of formal and convergent power series". **(82i:14004b)**
Belegradek, O. V. Unstable group theories. (Russian) **(82i:03027)**
 Decidable fragments of universal theories and existentially closed models. (Russian) **(82d:20033)**
Berline, Chantal Elimination of quantifiers for nonsemisimple rings of characteristic p . **(82k:03034)**
 Rings which admit elimination of quantifiers. **(82d:03046)**
Cherlin, Gregory Rings of continuous functions: decision problems. **(82c:03019)**
Delon, Françoise Définition de l'arithmétique dans la théorie des anneaux de séries formelles. (English summary) **(82a:12018)**
Denef, J. (with Lipshitz, Leonard) Ultraproducts and approximation in local rings. II. **(82g:13021)**
van den Dries, Lou Quantifier elimination for linear formulas over ordered and valued fields. **(82k:03035)**
Eklöf, Paul C. (with Mekler, Alan H.) Infinitary stationary logic and abelian groups. **(82j:03042)**
Eršov, Ju. L. Algebraically compact groups. (Russian) **(82c:20099a)**
 Algebraically compact groups. II. (Russian) **(82c:20099b)**
 Regularly closed fields. (Russian) **(82g:03050)**
 Eliminability of quantifiers in regularly closed fields. (Russian) **(82k:03036)**
Glass, A. M. W. (with Pierce, Keith R.) Equations and inequations in lattice-ordered groups. **(82c:06030)**
 (with Pierce, Keith R.) Existentially complete lattice-ordered groups. **(82h:06016)**
 Elementary types of automorphisms of linearly ordered sets—a survey. **(82c:06001)**

- Gončarov, S. S. Autostability of models and abelian groups. (Russian) (82g:03081)
- Hickin, Kenneth Keller (with Macintyre, Angus) Algebraically closed groups: embeddings and centralizers. (82c:20065)
- Hodges, Wilfrid In singular cardinality, locally free algebras are free. (82i:08005)
- Jacob, Bill A nullstellensatz for $R((t))$. (82c:13006)
- Jakubiková-Studenová, Danica On weakly rigid monounary algebras. (Russian summary) (82f:08007)
- Jarden, Moshe (with Roquette, Peter) The Nullstellensatz over p -adically closed fields. (82g:14027)
- Jensen, Christian U. (with Lenzing, H.) Model theory and representations of algebras. (82c:16029)
- Kegel, Otto H. Examples of highly transitive permutation groups. (82f:20011)
- Komori, Yuichi Completeness of two theories on ordered abelian groups and embedding relations. (82c:03053)
- Lam, T. Y. The theory of ordered fields. (82c:12033)
- Lampe, William A. (with Myers, Dale) Elementary properties of free extensions. (82j:03033)
- Lawrence, John W. Primitive rings do not form an elementary class. (82d:16005)
- Lenzing, H. See Jensen, Christian U., (82c:16029)
- Lipshitz, Leonard See Denef, J., (82g:13021); Becker, Joseph A., (82i:14004)
- Macintyre, Angus A theorem of Rabin in a general setting. (82c:03106)
- See also Hickin, Kenneth Keller, (82c:20065)
- Mekler, Alan H. See Eklof, Paul C., (82j:03042)
- Myers, Dale See Lampe, William A., (82j:03033)
- Németi, István See Andrëka, Hajnal, (82j:03081)
- Nerode, Anil See Ash, C. J., (82m:12014)
- Olin, Philip Varietal free products of bands. (82a:20065)
- (Pacholski, L.) See Model theory of algebra and arithmetic, (82a:03003)
- Pierce, Keith R. See Glass, A. M. W., (82h:06016) and Glass, A. M. W., (82c:06030)
- Poizat, Bruno Les équations différentielles vues par un logicien. (82g:12027)
- Sous-groupes définissables d'un groupe stable. (82g:03054)
- Prest, Mike Elementary torsion theories and locally finitely presented categories. (82h:18015)
- Quantifier elimination for modules. (82i:03037)
- Rogers, Pat Preservation of saturation and stability in a variety of nilpotent groups. (82c:20003)
- Roquette, Peter See Jarden, Moshe, (82g:14027)
- Rosický, Jiří Concrete categories and infinitary languages. (82m:18004)
- Seese, Detlef G. Partitions for trees. (82h:05056)
- See also Baudisch, Andreas; et al., (82i:03048)
- Shelah, Saharon On uncountable abelian groups. (82h:03054)
- Whitehead groups may not be free, even assuming CH. II. (82h:03055)
- The consistency of $\text{Ext}(G, \mathbb{Z}) = \mathbb{Q}$. (82k:03084)
- Toffalori, Carlo Existentially closed Archimedean semigroups. (Italian. English summary) (82h:20080)
- Some observations on existentially closed commutative rings. (Italian. English summary) (82f:13008)
- Tuschik, Hans-Peter See Baudisch, Andreas; et al., (82i:03048)
- Weese, Martin See Baudisch, Andreas; et al., (82i:03048)
- Weinberg, Elliot C. Automorphism groups of minimal η_α -sets. (82c:06032)
- Weispfenning, Volker Elimination of quantifiers for certain ordered and lattice-ordered abelian groups. (82h:03022)
- (Wierzejewski, J.) See Model theory of algebra and arithmetic, (82a:03003)
- (Wilkie, A. J.) See Model theory of algebra and arithmetic, (82a:03003)
- Zeitler, Horst Die Amalgamierungseigenschaft und reine Ringe. (82j:03036)
- Ziegler, Martin Algebraisch abgeschlossene Gruppen. (English summary) (82h:20004)
- Zil'ber, B. I. Strongly minimal countably categorical theories. (Russian) (82c:03043)

Conference:

- Applications of Logic to Algebra and Arithmetic ★Model theory of algebra and arithmetic. (82a:03003)
- Karpacz ★Model theory of algebra and arithmetic. (82a:03003)
- Logic ★Model theory of algebra and arithmetic. (82a:03003)
- Model theory of algebra and arithmetic ★Model theory of algebra and arithmetic. (82a:03003)

03C62 Models of arithmetic and set theory [See also 03Hxx.]

- Anapolitanos, D. A. Automorphisms of finite order and the axiom of choice. 82k:03049
- Blass, Andreas Conservative extensions of models of arithmetic. 82c:03051
- Corrada, Manuel Remarks on extendability of set-theoretical models preserving cardinality. 82c:03036
- Dickmann, M. A. Types remarquables et extensions de modèles dans l'arithmétique de Peano. I. 82h:03029
- See also Ressayre, Jean-Pierre, 82h:03030
- van den Dries, Lou Some model theory and number theory for models of weak systems of arithmetic. 82f:03029
- Hájek, Petr (with Pudlák, Pavel) Two orderings of the class of all countable models of Peano arithmetic. 82g:03061
- Kaufmann, Matt On existence of Σ_n end extensions. 82h:03031
- Marek, W. (with Zbierski, P.) On the number of models of the Kelley-Morse theory of classes. 82h:03069
- Murawski, Roman Some remarks on the structure of expansions. 82c:03052
- Nadel, Mark E. On a problem of MacDowell and Specker. 82d:03056
- Pudlák, Pavel See Hájek, Petr, 82g:03061
- Ressayre, Jean-Pierre Types remarquables et extensions de modèles dans l'arithmétique de Peano. II. 82h:03030
- Smoryński, Craig (with Stavi, J.) Cofinal extension preserves recursive saturation. 82g:03062
- Recursively saturated nonstandard models of arithmetic. 82i:03045
- Cofinal extensions of nonstandard models of arithmetic. 82g:03063

Elementary extensions of recursively saturated models of arithmetic. 82g:03064

- Stavi, J. See Smoryński, Craig, 82g:03062
- Yasumoto, Masahiro Classes on ZF models. 82d:03057
- Zbierski, P. See Marek, W., 82h:03069

secondary classifications:

- (Berline, Chantal) See Model theory and arithmetic, (82m:03004)
- Dahn, Bernd I. Constructions of classical models by means of Kripke models (survey). (82g:03065)
- David, René A result of relative consistency about the predicate $\text{WO}(\delta, x)$. (82h:03095)
- Dodd, A. (with Jensen, Ronald Björn) The core model. (82i:03063)
- Ellentuck, Erik Hyper-torres isols. (82f:03038)
- Fourman, Michael P. Sheaf models for set theory. (82i:03078)
- Freyd, Peter The axiom of choice. (82i:03079)
- Glass, A. M. W. (with Gurevich, Yuri; Holland, W. Charles; Shelah, Saharon) Rigid homogeneous chains. (82c:06001)
- Gurevich, Yuri See Glass, A. M. W.; et al., (82c:06001)
- Hinman, Roland Modèle constructible de la théorie des ensembles de Zermelo dans la théorie des types. (82c:03048)
- Holland, W. Charles See Glass, A. M. W.; et al., (82c:06001)
- Jensen, Ronald Björn See Dodd, A., (82i:03063)
- Kamo, Shizuo Nonstandard natural number systems and nonstandard models. (82g:03112)
- Kanovei, V. G. The set of all analytically definable sets of natural numbers can be analytically definable. (Russian) (82a:03043)
- Lin, Anna The least permutation model. (Russian summary) (82a:03052)
- Macintyre, Angus A theorem of Rabin in a general setting. (82c:03106)
- McAloon, Kenneth Les rapports entre la méthode des indicatrices et la méthode de Gödel pour obtenir des résultats d'indépendance. (82g:03098a)
- Progressions transfinies de théories axiomatiques, formes combinatoires du théorème d'incomplétude et fonctions récursives à croissance rapide. (82g:03098b)
- See also Model theory and arithmetic, (82m:03004)
- Misereque, D. Solutions de deux problèmes posés par H. Simmons. (82h:03091)
- (Pacholski, L.) See Model theory of algebra and arithmetic, (82a:03003)
- Paris, J. B. Some independence results for Peano arithmetic. (82d:03095)
- See also Wilkie, A. J., (82k:03074)
- (Ressayre, Jean-Pierre) See Model theory and arithmetic, (82m:03004)
- Shelah, Saharon See Glass, A. M. W.; et al., (82c:06001)
- (Wierzejewski, J.) See Model theory of algebra and arithmetic, (82a:03003)
- Wilkie, A. J. (with Paris, J. B.) Models of arithmetic and the rudimentary sets. (82k:03074)
- See also Model theory of algebra and arithmetic, (82a:03003)
- Wilson, Thomas P. General models of set theory. (82f:03043)
- Conference:
- Applications of Logic to Algebra and Arithmetic ★Model theory of algebra and arithmetic. (82a:03003)
- CNRS, Model Theory and Arithmetic ★Model theory and arithmetic. (82m:03004)
- Karpacz ★Model theory of algebra and arithmetic. (82a:03003)
- Logic ★Model theory of algebra and arithmetic. (82a:03003)
- Model theory of algebra and arithmetic ★Model theory of algebra and arithmetic. (82a:03003)
- Model theory and arithmetic ★Model theory and arithmetic. (82m:03004)
- Paris ★Model theory and arithmetic. (82m:03004)

03C65 Models of other specific theories

- Basarab, Șerban A. Extension of places and contraction properties for function fields over p -adically closed fields. 82j:03040
- van den Dries, Lou Which curves over \mathbb{Z} have points with coordinates in a discrete ordered ring? 82i:03046
- Glass, A. M. W. (with Gurevich, Yuri; Holland, W. Charles; Jambu-Giraudet, Michèle) Elementary theory of automorphism groups of doubly homogeneous chains. 82i:03047
- Gurevich, Yuri See Glass, A. M. W.; et al., 82i:03047
- Herre, Heinrich (with Seese, Detlef G.) Concerning the monadic theory of the topology of well-orderings and scattered spaces. 82f:03030
- Holland, W. Charles See Glass, A. M. W.; et al., 82i:03047
- Jambu-Giraudet, Michèle See Glass, A. M. W.; et al., 82i:03047
- Komori, Yuichi Completeness of two theories on ordered abelian groups and embedding relations. 82c:03053
- Seese, Detlef G. See Herre, Heinrich, 82f:03030

secondary classifications:

- Andrëka, Hajnal (with Németi, István) Dimension-complemented and locally finite-dimensional cylindric algebras are elementarily equivalent. (82j:03081)
- Delon, Françoise Définition de l'arithmétique dans la théorie des anneaux de séries formelles. (English summary) (82a:12018)
- Eršov, Ju. L. ★Проблемы разрешимости в конструктивных моделях. (Russian) [Decision problems and constructivizable models] (82h:03009)
- Glass, A. M. W. Elementary types of automorphisms of linearly ordered sets—a survey. (82c:06001)
- (with Gurevich, Yuri; Holland, W. Charles; Shelah, Saharon) Rigid homogeneous chains. (82c:06001)
- Gurevich, Yuri (with Holland, W. Charles) Recognizing the real line. (82g:03060)
- See also Glass, A. M. W.; et al., (82c:06001)
- Hausser, David Model completeness of an algebra of languages. (82h:03048)
- Herre, Heinrich (with Wolter, Helmut) Untersuchungen zur Theorie der linearen Ordnung in Logiken mit Mächtigkeitsquantoren. (82j:03008)
- Holland, W. Charles See Glass, A. M. W.; et al., (82c:06001) and Gurevich, Yuri, (82g:03060)

- Lachlan, A. H. (with Woodrow, Robert E.) Countable ultrahomogeneous undirected graphs. (82c:05083)
- Lisovik, L. P. Sets that are expressible in theories of commutative semigroups. (Russian. English summary) (82j:03039)
- Manaster, Alfred B. (with Remmel, Jeffrey B.) Some decision problems for subtheories of two-dimensional partial orderings. (82b:03011)
- Németi, István See Andréka, Hajnal, (82j:03081)
- Remmel, Jeffrey B. Recursively categorical linear orderings. (82j:03037)
- See also Manaster, Alfred B., (82b:03011)
- Schusert, James Henry Decidability and finite axiomatizability of theories of \aleph_0 -categorical partially ordered sets. (82b:03024)
- Shelah, Saharon See Glass, A. M. W.; et al., (82c:06001)
- Stums, Teo Universal cointeracts in some categories of chains and Boolean algebras. (82d:06002)
- Todorćević, Stevo B. Very strongly rigid Boolean algebras. (82b:06017)
- Toffalori, Carlo Existentially closed Archimedean semigroups. (Italian. English summary) (82b:20060)
- See also Sheaves of pairs of real closed fields. (82m:03048)
- Wolter, Helmut See Herre, Heinrich, (82c:03008)
- Woodrow, Robert E. See Lachlan, A. H., (82c:05083)
- Zeidler, Horst Die Amalgamierungseigenschaft und reine Ringe. (82j:03036)

03C68 Other classical first-order model theory

- Anapolitanos, D. A. (with Väinänen, Jouko) On the axiomatizability of the notion of an automorphism of a finite order. 82b:03070
- Dahn, Bernd I. Constructions of classical models by means of Kripke models (survey). 82b:03065
- Gold, Jerrold M. Some results on the structure of the φ -spectrum. 82c:03037
- Krasner, Marc Abstract Galois theory. 82j:03041
- Pouzet, Maurice Application de la notion de relation presque-enchâssable au dénombrement des restrictions finies d'une relation. 82b:03050
- Rothmaler, Philipp A note on I -types. 82d:03058
- Väinänen, Jouko See Anapolitanos, D. A., 82b:03070

secondary classifications:

- Benda, Miroslav Modeloids. I. (82g:08002)
- Casari, Ettore Positively omitting types. (82i:03017)
- Csirmaz, László A survey of semantics of Floyd-Hoare derivability. (82j:68005)
- Ferro, Alfredo (with Micale, Biagio) On models of a first-order theory in which certain formulas define a model of another theory. (Italian. English summary) (82i:03043)
- Glass, A. M. W. (with Gurevich, Yuri; Holland, W. Charles; Jambu-Giraudet, Michèle) Elementary theory of automorphism groups of doubly homogeneous chains. (82c:03047)
- Gurevich, Yuri See Glass, A. M. W.; et al., (82i:03047)
- Holland, W. Charles See Glass, A. M. W.; et al., (82c:03047)
- Jambu-Giraudet, Michèle See Glass, A. M. W.; et al., (82i:03047)
- Micale, Biagio See Ferro, Alfredo, (82i:03043)
- Titiev, Robert J. A locus problem involving the three-dimensional city-block metric. (82h:92047)

03C70 Logic on admissible sets

- Harrington, Leo Extensions of countable infinitary logic which preserve most of its nice properties. 82g:03066
- Kierstead, Henry A. Countable models of ω_1 -categorical theories in admissible languages. 82c:03054
- Makkai, Michael An example concerning Scott heights. 82m:03049

secondary classifications:

- Cutland, Nigel (with Kaufmann, Matt) Σ_1 -well-founded compactness. (82d:03060)
- Kaufmann, Matt See Cutland, Nigel, (82d:03060)

03C75 Other infinitary logic

- Barwise, K. Jon Infinitary logics. (See 82f:03002)
- Karttunen, Maaret Infinitary languages $N_{\omega,\omega}$ and generalized partial isomorphisms. 82k:03051
- Kueker, David W. $L_{\omega,\omega}$ elementarily equivalent models of power ω_1 . 82k:03052
- Misawa, Tsuneo Consistency properties for Hausdorff logic. 82g:03067
- Przymusińska, Halina On κ -valued infinitary predicate calculi. (Russian summary) 82k:03053a
- Some results concerning κ -valued infinitary predicate calculi. (Russian summary) 82k:03053b
- Gentzen-type semantics for κ -valued infinitary predicate calculi. (Russian summary) 82k:03053c
- Craig interpolation theorem and Hanf number for κ -valued infinitary predicate calculi. (Russian summary) 82k:03053d
- Shelah, Saharon On the number of nonisomorphic models of cardinality λ $L_{\omega,\lambda}$ -equivalent to a fixed model. 82k:03054

secondary classifications:

- Back, Ralph-Johan Proving total correctness of nondeterministic programs in infinitary logic. (82h:68010)
- Benda, Miroslav Modeloids. I. (82g:08002)
- Eklöf, Paul C. (with Mekler, Alan H.) Infinitary stationary logic and abelian groups. (82j:03042)
- Fujiwara, Tsuyoshi Existentially closed structures and algebraically closed structures. (See 82f:20008)

- Hodges, Wilfrid (with Shelah, Saharon) Infinite games and reduced products. (82f:03025)

- Luo, Li Bo The interpolation theorem for the propositional calculus $P(\kappa)$ when κ is a strongly inaccessible cardinal. (Chinese) (82i:03014)
- Makowsky, J. A. Measuring the expressive power of dynamic logics: an application of abstract model theory. (82c:03022)
- Mekler, Alan H. See Eklöf, Paul C., (82j:03042)
- Németi, István From hereditary classes to varieties in abstract model theory and partial algebra. (82a:03025)
- Oikkonen, Juha On PC- and RPC-classes in generalized model theory. (82d:03064)
- Pillay, Anand N_1 -categoricity in regular subsets of $L_{\omega,\omega}$. (82d:03047)
- Rosický, Jiří Concrete categories and infinitary languages. (82m:18004)
- Shelah, Saharon See Hodges, Wilfrid, (82f:03025)

03C80 Logic with extra quantifiers and operators [See also 03B45.]

- Anapolitanos, D. A. (with Väinänen, Jouko) Decidability of some logics with free quantifier variables. 82d:03059
- Barwise, K. Jon (with Kaufmann, Matt; Makkai, Michael) Stationary logic. 82f:03031a
- (with Kaufmann, Matt; Makkai, Michael) A correction to: "Stationary logic". 82f:03031b
- Baudisch, Andreas (with Seese, Detlef G.; Tuschik, Hans-Peter; Weese, Martin) \star Decidability and generalized quantifiers. 82i:03048
- The theory of abelian p -groups with the quantifier I is decidable. 82g:03068
- Bruce, Kim B. Model constructions in stationary logic. I. Forcing. 82f:03032
- Caicedo Ferrer, Xavier On extensions of $L_{\omega,\omega}(Q_1)$. 82b:03071
- Chlebus, Bogdan Stanislaw Decidability and definability results concerning well-orderings and some extensions of first order logic. 82b:03072
- Cowles, John R. Generalized Archimedean fields and logics with Malitz quantifiers. 82b:03032
- Cutland, Nigel (with Kaufmann, Matt) Σ_1 -well-founded compactness. 82d:03060
- Eklöf, Paul C. (with Mekler, Alan H.) Stationary logic of finitely determinate structures. 82f:03033
- (with Mekler, Alan H.) Infinitary stationary logic and abelian groups. 82j:03042
- Fajardo V., Sergio Compactness and decidability of monadic logics with cardinality quantifiers. (Spanish) 82c:03038
- Hauschild, Kurt Zum Vergleich von Härtigquantor und Rescherquantor. 82b:03033
- Heindorf, Lutz Comparing the expressive power of some languages for Boolean algebras. 82m:03050
- Herre, Heinrich (with Wolter, Helmut) The decision problem for the theory of linear orderings in extended logics. 82c:03055
- Kaufmann, Matt See Cutland, Nigel, 82d:03060 and Barwise, K. Jon; et al., 82f:03031
- Krynicky, M. On the expressive power of the language using the Henkin quantifier. 82c:03056
- Makkai, Michael See Barwise, K. Jon; et al., 82f:03031
- Malitz, J. (with Rubin, Matatyahu) Compact fragments of higher order logic. 82k:03055
- Mekler, Alan H. See Eklöf, Paul C., 82f:03033 and 82j:03042
- Rubin, Matatyahu See Malitz, J., 82k:03055
- Seese, Detlef G. Stationary logic and ordinals. 82f:03034
- See also Baudisch, Andreas; et al., 82i:03048
- Tuschik, Hans-Peter See Baudisch, Andreas; et al., 82i:03048
- Väinänen, Jouko On Hanf numbers of unbounded logics. 82h:03034
- See also Anapolitanos, D. A., 82d:03059
- Weese, Martin Generalized Ehrenfeucht games. 82a:03033
- See also Baudisch, Andreas; et al., 82i:03048
- Wolter, Helmut See Herre, Heinrich, 82c:03055

secondary classifications:

- Andréka, Hajnal (with Németi, István; Sain, Ildikó) Program verification within and without logic. (82h:68005)
- Asser, Günter Über die Charakterisierbarkeit transfiniter Mächtigkeiten im Prädikatenkalkül der zweiten Stufe. (82d:03017)
- Bowen, Kenneth A. Interpolation in loop-free logic. (82c:03020)
- Goltz, Hans-Joachim Untersuchungen zur Elimination verallgemeinerter Quantoren in Körpertheorien. (English, Russian and French summaries) (82j:03032)
- Harrington, Leo Extensions of countable infinitary logic which preserve most of its nice properties. (82g:03066)
- Herre, Heinrich (with Wolter, Helmut) Untersuchungen zur Theorie der linearen Ordnung in Logiken mit Mächtigkeitsquantoren. (82j:03008)
- Kakuda, Yuzuru Set theory based on the language with the additional quantifier "for almost all". I. (82f:03044)
- Lindström, Per Omitting uncountable types and extensions of elementary logic. (82d:03062)
- Mundici, Daniele Robinson's consistency theorem in soft model theory. (82d:03063)
- Németi, István See Andréka, Hajnal; et al., (82h:68005)
- Sain, Ildikó See Andréka, Hajnal; et al., (82h:68005)
- Wolter, Helmut See Herre, Heinrich, (82j:03008)

03C85 Second- and higher-order model theory

- Gurevich, Yuri Two notes on formalized topology. 82c:03057
- Pinus, A. G. The Löwenheim-Skolem property for second-order logics. (Russian) 82c:03058
- Prestel, Alexander (with Ziegler, Martin) Nonaxiomatizable classes of V -topological fields. 82b:03073
- Ziegler, Martin See Prestel, Alexander, 82b:03073

secondary classifications:

- Asser, Günter Über die Charakterisierbarkeit transfiniter Mächtigkeiten im

- Prädikatenkalkül der zweiten Stufe. (82d:03017)
 Herre, Heinrich (with Seese, Detlef G.) Concerning the monadic theory of the topology of well-orderings and scattered spaces. (82f:03030)
 Kryncki, M. On the expressive power of the language using the Henkin quantifier. (82c:03056)
 Marek, W. (with Zbierski, P.) On the number of models of the Kelley-Morse theory of classes. (82b:03069)
 Seese, Detlef G. See Herre, Heinrich. (82f:03030)
 Zbierski, P. See Marek, W., (82b:03069)

03C90 Nonclassical models (Boolean-valued, sheaf, etc.)

- Fourman, Michael P. (with Scott, Dana S.) Sheaves and logic. 82d:03061
 (with Hyland, J. M. E.) Sheaf models for analysis. 82g:03069
 Hyland, J. M. E. See Fourman, Michael P., 82g:03069
 Scott, Dana S. See Fourman, Michael P., 82d:03061

secondary classifications:

- Berman, Francine A completeness technique for D -axiomatizable semantics. (82c:03018)
 Burris, Stanley (with Werner, Heinrich) Sheaf constructions and their elementary properties. (82d:03049)
 Dikarm, J. Weakly monadic Boolean extension functors. (82e:18010)
 Grayson, R. J. Heyting-valued models for intuitionistic set theory. (82g:03009)
 Concepts of general topology in constructive mathematics and in sheaves. (82g:03105)
 Koppelberg, Bernd Ultrapowers and Boolean ultrapowers of ω and ω_1 . (82d:03048)
 Petrescu, Ioana Existential morphisms and existentially closed models of logical categories. (82k:03104)
 Werner, Heinrich See Burris, Stanley, (82d:03049)

03C95 Abstract model theory

- Andréka, Hajnal (with Németi, István) Löf lemma holds in every category. 82i:03049
 Lindström, Per Omitting uncountable types and extensions of elementary logic. 82d:03062
 Mundici, Daniele An algebraic result about soft model theoretical equivalence relations with an application to H. Friedman's fourth problem. 82k:03056
 Robinson's consistency theorem in soft model theory. 82d:03063
 Applications of many-sorted Robinson consistency theorem. 82k:03057
 Nadel, Mark E. An arbitrary equivalence relation as elementary equivalence in an abstract logic. 82g:03070
 Németi, István See Andréka, Hajnal, 82i:03049
 Oikkonen, Juha On PC- and RPC-classes in generalized model theory. 82d:03064

secondary classifications:

- Makowsky, J. A. Measuring the expressive power of dynamic logics: an application of abstract model theory. (82c:03022)
 Németi, István From hereditary classes to varieties in abstract model theory and partial algebra. (82a:03025)
 Väinänen, Jouko On Hanf numbers of unbounded logics. (82h:03034)
 Weese, Martin Generalized Ehrenfeucht games. (82a:03033)

03C99 None of the above, but in this section

secondary classifications:

- Bertoni, Alberto (with Mauri, Giancarlo; Miglioli, P. A.) Towards a theory of abstract data types: a discussion on problems and tools. (82c:68013)
 Engeler, Erwin Generalized Galois theory and its application to complexity. (82j:68018)
 Földes, Stéphane (with Mendelsohn, E.) Concrete categories and monoids of relational structures. (82j:18006)
 Marković, Zoran An intuitionistic omitting types theorem. (82g:03103)
 Mauri, Giancarlo See Bertoni, Alberto; et al., (82c:68013)
 Mendelsohn, E. See Földes, Stéphane, (82j:18006)
 Miglioli, P. A. See Bertoni, Alberto; et al., (82c:68013)
 Nourani, Farshid A model-theoretic approach to specification, extension, and implementation. (82a:68037)
 Rauszer, Cecylia An algebraic and Kripke-style approach to a certain extension of intuitionistic logic. (82k:03100)

03Dxx Recursion theory

- (Dekker, Jim) See Recursive function theory, 82d:03065
 Hermes, Hans Recursion theory. (See 82f:03002)
 Kleene, Stephen C. The theory of recursive functions, approaching its centennial. 82k:03058
 New York ★Recursive function theory. 82d:03065
 Proceedings of Symposia in Pure Mathematics ★Recursive function theory. 82d:03065
 Recursive function theory ★Recursive function theory. 82d:03065
 Symposium: Recursive Function Theory ★Recursive function theory. 82d:03065

secondary classifications:

- Cohors-Fresenborg, Elmar Möglichkeiten und Grenzen einer algorithmischen Mathematik. (82k:03001)
 (Crossley, John N.) See Aspects of effective algebra, (82h:03003)
 Kleene, Stephen C. Origins of recursive function theory. (82d:03003)
 Manin, Ju. I. ★Вычислимость и невычислимость. (Russian) [Computable and

- noncomputable] (82i:03002)
 Pohl, Ira (with Shaw, Alan C.) ★The nature of computation: an introduction to computer science. (82j:68002)
 Shapiro, Stewart Understanding Church's thesis. (82j:03006)
 Shaw, Alan C. See Pohl, Ira, (82j:68002)
 Aspects of effective algebra ★Aspects of effective algebra. (82h:03003)
 Clayton ★Aspects of effective algebra. (82h:03003)
 Conference: Aspects of Effective Algebra ★Aspects of effective algebra. (82h:03003)

03D03 Thue and Post systems, etc.

- Book, Ronald V. The undecidability of a word problem: on a conjecture of Strong, Maggiolo-Schettini and Rosen. 82h:03035
 Börger, Egon (with Kleine-Büning, Hans) The r.e. complexity of decision problems for commutative semi-Thue systems with recursive rule set. 82h:03074
 Kleine-Büning, Hans See Börger, Egon, 82h:03074

secondary classifications:

- Berstel, Jean Sur la construction de mots sans carré. (82a:68156)
 Gabriëlian, Armen Pure grammars and pure languages. (82f:68077)

03D05 Automata and formal grammars in connection with logical questions [See also 18B20, 68Dxx, 68F10.]

- Abiaev, F. M. The relation of automatic measures of the complexity of languages to Loveland's complexity of word resolution. (Russian) 82j:03043
 Cohen, Rina S. (with Gold, Arie Y.) ω -computations on deterministic pushdown machines. 82i:03050
 Constable, Robert L. The role of finite automata in the development of modern computing theory. 82k:03059
 Ertl, Wolfgang (with Leitsch, Alexander) Aufzählung subrekursiver Klassen und konstruierende Automaten. 82c:03059
 Gold, Arie Y. See Cohen, Rina S., 82i:03050
 Leitsch, Alexander See Ertl, Wolfgang, 82c:03059
 Muller, David E. (with Schupp, Paul E.) Context-free languages, groups, the theory of ends, second-order logic, tiling problems, cellular automata, and vector addition systems. 82m:03051
 Schupp, Paul E. See Muller, David E., 82m:03051

secondary classifications:

- Albert, Jürgen (with Culik, K., II) Test sets for homomorphism equivalence on context-free languages. (82c:68070)
 Anisimov, A. V. Discrete backtracking converters. (82h:68079)
 Araki, Toshiro (with Tokura, Nobuki) Flow languages equal recursively enumerable languages. (82h:68099)
 Baron, Gerd (with Kuich, Werner) The characterization of nonexpansive grammars by rational power series. (82i:68047)
 Barth, G. Fast recognition of context-sensitive structures. (German summary) (82g:68065)
 Bertoni, Alberto (with Mauri, Giancarlo) On efficient computation of the coefficients of some polynomials with applications to some enumeration problems. (82i:68026)
 Bolotov, A. A. On problems of reducibility and expressibility for homogeneous structures with inputs and outputs. (Russian) (82k:68022)
 Brandenburg, Franz-Josef Three write heads are as good as k . (82a:68099)
 Brandstätt, Andreas Closure properties of certain families of formal languages with respect to a generalization of cyclic closure. (French summary) (82h:68101)
 Bucher, W. (with Maurer, Hermann A.; Culik, K., II; Wotschke, D.) Concise description of finite languages. (82f:68075)
 Buevit, V. A. On r -completeness in the class of automaton mappings. (Russian) (82i:68038)
 Claus, Volker The (n, k) -bounded emptiness problem for probabilistic acceptors and related problems. (82j:68095)
 Courcelle, Bruno An axiomatic approach to the Korenjak-Hopcroft algorithms. (82k:68042)
 Culik, K., II (with Diamond, N. D.) A homomorphic characterization of time and space complexity classes of languages. (82c:68089)
 (with Karhumäki, Juhani) On the equality sets for homomorphisms on free monoids with two generators. (French summary) (82f:68076)
 See also Albert, Jürgen, (82c:68070) and Bucher, W.; et al., (82f:68075)
 Diamond, N. D. See Culik, K., II, (82c:68089)
 Ehrenfeucht, A. (with Rozenberg, Grzegorz) DOS systems and languages. (82a:68141)
 (with Maurer, Hermann A.; Rozenberg, Grzegorz) Continuous grammars. (82d:68045)
 (with Rozenberg, Grzegorz) On basic properties of DOS systems and languages. (82d:68046)
 (with Rozenberg, Grzegorz) On the subword complexity of square-free DOL languages. (82i:68048)
 Engelfriet, Joost (with Filé, Gilberto) Passes and paths of attribute grammars. (82i:68043)
 Felea, V. Relational VT-algebras over free theories. (82j:68034)
 Filé, Gilberto See Engelfriet, Joost, (82i:68043)
 Forýs, Maria On some application of F -grammars to pattern description. (Polish and Russian summaries) (82i:68049)
 On F -languages and their grammars. (82g:68069)
 Forýs, Wit F -languages and F -automata. (82g:68068)
 Freivalds, Rūpīš Fast probabilistic algorithms. (82a:68089)
 Gabriëlian, Armen Pure grammars and pure languages. (82f:68077)
 Georgeff, M. P. Interdependent translation schemes. (82f:68078)

- Ginsburg, Seymour (with Kintala, Chandra M. R.) Strict interpretations of deterministic pushdown acceptors. (82f:68079)
- Gostev, Ju. G. Atornary languages and grammars. On the theory of data structure families. (82c:68044)
- Greibach, S. A. Formal languages: origins and directions. (82h:68103)
- Gurari, Eitan M. (with Ibarra, Oscar H.) The complexity of decision problems for finite-turn multicounter machines. (82j:68031b)
- Harrison, Michael A. (with Yehudai, Amir) Eliminating null rules in linear time. (82c:68076)
- Ibarra, Oscar H. See Gurari, Eitan M., (82j:68031b)
- Istrail, Sorin On complements of some bounded context-sensitive languages. (82h:68063)
- Janicki, Ryszard Some remarks on deterministic Mazurkiewicz algorithms and languages associated with them. (82g:68070)
- Joshi, Aravind K. (with Levy, Leon S.; Yuch, Kang) Local constraints in programming languages. I. Syntax. (82f:68080)
- Kalisz, Eugenia The conversion of PRIM-URM conflicts in context-free grammars into PRIM-PRIM conflicts. (Romanian. English summary) (82g:68071)
- Karhumäki, Juhani Generalized Parikh mappings and homomorphisms. (82k:68026)
- See also Culik, K., II, (82f:68076)
- Karpinski, Marek ★The ultimate equivalence of iterated homomorphisms is recursively unsolvable. (82j:68027)
- Kinber, E. B. On inclusion problem for deterministic multitape automata. (82f:68055)
- Kintala, Chandra M. R. See Ginsburg, Seymour, (82f:68079)
- Klečev, A. S. Relational model of computations. (82f:68016)
- Kuich, Werner See Baron, Gerd, (82i:68047)
- Kurdumov, G. I. An algorithm-theoretic method for the study of uniform random networks. (82j:68033)
- Kuzenko, V. F. See Zubenko, V. V.; et al., (82g:68081)
- Leiss, Ernst On generalized language equations. (82h:68066)
- Succinct representation of regular languages by Boolean automata. (82c:68090)
- Levy, Leon S. See Joshi, Aravind K.; et al., (82f:68080)
- Lewis, F. D. A note on context free languages, complexity classes, and diagonalization. (82i:03035)
- Lisovik, L. P. Recursive-determinate abstract automata. (82k:68023)
- See also Red'ko, V. N., (82b:20101)
- Loui, Michael C. A space bound for one-tape multidimensional Turing machines. (82c:68052)
- Maihaum, T. S. E. Pumping lemmas for term languages. (82c:68081)
- Maurer, Hermann A. See Ehrenfeucht, A.; et al., (82d:68045) and Bucher, W.; et al., (82f:68075)
- Mauri, Giancarlo See Bertoni, Alberto, (82i:68026)
- Micali, Silvio Two-way deterministic finite automata are exponentially more succinct than sweeping automata. (82d:68034)
- Moll, K. R. Left context precedence grammars. (82j:68079)
- Nijholt, Anton ★Context-free grammars: covers, normal forms, and parsing. (82f:68081)
- Pnueli, Amir (with Slutzki, Giora) Automatic programming of finite state linear programs. (82m:68103)
- Red'ko, V. N. (with Lisovik, L. P.) Regular events in semigroups. (Russian) (82b:20101)
- Rozenberg, Grzegorz See Ehrenfeucht, A., (82a:68141); (82d:68045); (82d:68046) and (82i:68048)
- Rus, Teodor HAS-Hierarchy: a natural tool for language specification. (82k:68046)
- Sakarovitch, Jacques Sur une propriété d'itération des langages algébriques déterministes. (English summary) (82f:68032)
- Sedivá-Trnková, Věra General theory of relational automata. (82c:68058)
- Silberger, D. M. Universal terms of complexity three. (82c:08006)
- Simovici, Dan A. Polylocal languages. (82g:68077)
- Context-sensitive languages and Ackermann's function. (82c:68052)
- Computing of graphs of relations using generative grammars. (French summary) (82d:68048)
- Škil'njak, S. S. See Zabenko, V. V.; et al., (82g:68081)
- Slutzki, Giora See Pnueli, Amir, (82m:68103)
- Solov'ev, S. Ju. On a constructive procedure of grammatical inference. (Russian) (82g:68078)
- Tao, Ren Ji On the computational power of automata with time or space bounded by Ackermann's or superexponential functions. (82m:68093)
- Toca, Aurelia Ω -automata. (82c:68037)
- Tokura, Nobuki See Araki, Toshiro, (82h:68099)
- Wasilewska, Anita On the Gentzen-type formalizations. (82g:03102)
- Wegner, Lutz Bracketed two-level grammars—a decidable and practical approach to language definitions. (82c:68088)
- Winkler, Peter M. Computational characterization of abelian groups. (82h:20051)
- Wotschke, D. See Bucher, W.; et al., (82f:68075)
- Yehudai, Amir The decidability of equivalence for a family of linear grammars. (82d:68049)
- See also Harrison, Michael A., (82c:68076)
- Yueh, Kang See Joshi, Aravind K.; et al., (82f:68080)
- Zubenko, V. V. (with Kuzenko, V. F.; Škil'njak, S. S.) ★Синтаксические определения и проблема перераспределения. (Russian) [Syntactical definitions and the problem of reorientation] (82g:68081)

03D10 Turing machines and related notions [See also 68C40.]

- Cazacu, Maria The simulation relations between the classes of algorithms. (Romanian summary) 82c:03039
- Dégtev, A. N. Nonerasing Turing machines. (Russian) 82c:03060
- Deutsch, Michael Registermaschinen über Quotiententermengen. 82j:03044
- Gandy, Robin Church's thesis and principles for mechanisms. 82h:03036

secondary classifications:

- Adleman, Leonard M. (with Loui, Michael C.) Space-bounded simulation of multitape

Turing machines. (82g:03071)

- Brandstädt, Andreas Über den Einfluss eines zusätzlichen Einweg-Eingabebandes bei Entscheidungen und Aufzählungen mit beschränktem Regime sowie beschränkter Rückkehr bzw. beschränkter dualer Rückkehr auf einbändigen Turingmaschinen. (82a:68067)
- Freivalds, Rūpīš Fast probabilistic algorithms. (82a:68089)
- Ibarra, Oscar H. (with Rosier, Louis E.) On restricted one-counter machines. (82f:68086)
- Klosinski, Leonard F. See Smolarski, Dennis C., (82i:10013)
- Loui, Michael C. See Adleman, Leonard M., (82g:03071)
- Močenskii, V. A. Turing a -computations and essential complexity of a -inversions of binary words. (Russian) (82j:68023)
- Paul, Wolfgang J. (with Prauß, Ernst-Jürgen; Reischuk, Rüdiger) On alternation. (82c:68048a)
- (with Reischuk, Rüdiger) On alternation. II. A graph-theoretic approach to determinism versus nondeterminism. (82c:68048b)
- Prauß, Ernst-Jürgen See Paul, Wolfgang J.; et al., (82c:68048a)
- Reischuk, Rüdiger See Paul, Wolfgang J.; et al., (82c:68048)
- Rogožin, Ju. V. Universal one-place partial recursive functions. (Russian) (82j:03046)
- Rosier, Louis E. See Ibarra, Oscar H., (82f:68086)
- Simon, Janos Division in idealized unit cost RAMs. (82i:68030)
- On tape-bounded probabilistic Turing machine acceptors. (82i:68032)
- Smolarski, Dennis C. (with Klosinski, Leonard F.) Recognition algorithms for Fibonacci numbers. (82i:10013)
- Zolotova, N. V. Recursive schemes. (Russian) (See 81c:00007)

03D15 Complexity of computation

- Adleman, Leonard M. (with Loui, Michael C.) Space-bounded simulation of multitape Turing machines. 82g:03071
- Adrianopol, Fausto Conjugated measures of computational complexity. 82g:03072
- Alton, Donald A. "Natural" programming languages and complexity measures for subrecursive programming languages: an abstract approach. 82i:03051
- Beltjukov, A. P. Hierarchies of complexity of computation of partial functions with values 0 and 1. (Russian) 82d:03066
- Bennison, Victor L. Information content characterizations of complexity-theoretic properties. 82a:03034
- Berman, Leonard The complexity of logical theories. 82c:03061b
- Bruss, Anna R. (with Meyer, Albert R.) On time-space classes and their relation to the theory of real addition. 82c:03061a
- Grigor'ev, D. Ju. Complexity of "wild" matrix problems and of the isomorphism of algebras and graphs. (Russian. English summary) 82k:03060
- Kozen, Dexter Indexings of subrecursive classes. 82a:03035
- Ladner, Richard E. Complexity theory with emphasis on the complexity of logical theories. 82i:03037
- Lewis, F. D. A note on context free languages, complexity classes, and diagonalization. 82f:03035
- Lewis, Harry R. Complexity results for classes of quantificational formulas. 82m:03052
- Loui, Michael C. See Adleman, Leonard M., 82g:03071
- Lubiw, Anna Some NP-complete problems similar to graph isomorphism. 82f:03036
- Makarov, I. I. A theorem on the unprovability of lower time estimates for a certain class of functions. (Russian) 82c:03062
- Manders, Kenneth L. Computational complexity of decision problems. 82m:03053
- Meyer, Albert R. See Bruss, Anna R., 82c:03061a
- Nazarjan, G. A. The relations of some complexity characteristics of sets of Boolean functions. (Russian. Armenian summary) 82g:03073
- Stoltenberg-Hansen, Viggo On computational complexity in weakly admissible structures. 82a:03036

secondary classifications:

- Adleman, Leonard M. (with Manders, Kenneth L.) Reductions that lie. (82f:68045)
- Aspvall, Bengt Recognizing disguised NR(1) instances of the satisfiability problem. (82a:68051)
- Auslander, L. (with Winograd, Shmuel) The multiplicative complexity of certain semilinear systems defined by polynomials. (82g:68039)
- Blum, Edward K. See Lynch, Nancy A., (82f:68018)
- Book, Ronald V. (with Brandenburg, Franz-Josef) Equality sets and complexity classes. (82h:68074)
- Borodin, Allan (with Fischer, Michael J.; Kirkpatrick, David G.; Lynch, Nancy A.; Tompa, Martin) A time-space tradeoff for sorting on nonoblivious machines. (82i:68042)
- Brandenburg, Franz-Josef See Book, Ronald V., (82h:68074)
- Colbourn, Charles J. Isomorphism complete problems on matrices. (82g:68040)
- Comment-Walter, Beate (with Sattler, Jürgen) Size-depth tradeoff in nonmonotone Boolean formulae. (82g:94026)
- Culik, K., II (with Diamond, N. D.) A homomorphic characterization of time and space complexity classes of languages. (82c:68089)
- Daley, Robert P. The busy beaver method. (82a:03040)
- Diamond, N. D. See Culik, K., II, (82c:68089)
- Dikovskii, A. Ja. A theory of complexity of monadic recursion schemes. (French summary) (82d:68032)
- Downey, Peter (with Leong, Benton; Sethi, Ravi) Computing sequences with addition chains. (82h:68064)
- Ehrig, Hartmut (with Mahr, Bernd) Complexity of algebraic implementations for abstract data types. (82m:68083)
- Engeler, Erwin Generalized Galois theory and its application to complexity. (82j:68018)
- Erni, W. (with Lapsien, R.) On the time and tape complexity of weak unification. (82f:68047)
- Even, Shimon (with Yacobi, Yacov) An observation concerning the complexity of problems with few solutions and its application to cryptography. (82h:68065)

- Farat, V. M. See Koževnikova, G. P., (82g:68044)
- Fischer, Michael J. See Borodin, Allan; et al., (82a:68042)
- Fraenkel, Aviezri S. (with Yesha, Yaacov) Complexity of solving algebraic equations. (82a:68071)
- Fürer, Martin The complexity of the inequivalence problem for regular expressions with intersection. (82g:68042)
- Gati, Georg Some elements of a Galois theory of the structure and complexity of the tree automorphism problem. (82h:68073)
- Goldschlager, Leslie M. An approximation algorithm for computing the permanent. (82h:68066)
- Goralčík, Pavel See Goralčíková, Alla; et al., (82h:03088)
- Goralčíková, Alla (with Goralčík, Pavel; Koubek, Václav) Testing of properties of finite algebras. (82h:03088)
- Grigoras, Gh. On the completeness in abstract complexity classes of languages. (82h:68075)
- Gurari, Eitan M. (with Ibarra, Oscar H.) Path systems: constructions, solutions and applications. (82f:68048)
(with Ibarra, Oscar H.) The complexity of the equivalence problem for simple programs. (82g:68043)
(with Ibarra, Oscar H.) The complexity of decision problems for finite-turn multicounter machines. (82j:68031b)
(with Ibarra, Oscar H.) The complexity of the equivalence problem for two characterizations of Presburger sets. (82m:68084)
- Hačijan, L. G. See Tarasov, S. P., (82f:68052)
- Hafner, Izidor On proof length in the equational calculus. (82a:03094)
- Harrison, Michael A. (with Yehudai, Amir) Eliminating null rules in linear time. (82e:68076)
- Hartmanis, Juris ★Feasible computations and provable complexity properties. (82c:68021)
- Ibarra, Oscar H. See Gurari, Eitan M., (82f:68048); (82g:68043); (82j:68031b) and (82m:68084)
- Immerman, Neil Length of predicate calculus formulas as a new complexity measure. (82h:68035)
- Ja' Ja', Joseph On the complexity of bilinear forms with commutativity. (82f:68049)
- Kanellakis, Paris C. On the computational complexity of cardinality constraints in relational databases. (82m:68041)
- Katseff, Howard P. (with Sipser, Michael) Several results in program size complexity. (82i:68028)
- Kirkpatrick, David G. See Borodin, Allan; et al., (82i:68042)
- Kosovskii, N. K. An example of a sequence of symbols with large subrecursive complexity of initial segments in Kolmogorov's sense. (Russian) (82a:68077)
- Koubek, Václav See Goralčíková, Alla; et al., (82h:03088)
- Koževnikova, G. P. (with Farat, V. M.) Algorithms for translation of algebraic expressions into an improved parenthesis-free notation and an analysis of their effectiveness. (Russian) (82g:68044)
- Lapsien, R. See Erni, W., (82f:68047)
- Leggett, E. W., Jr. (with Moore, Daniel J.) Optimization problems and the polynomial hierarchy. (82m:68085)
- Leong, Benton See Downey, Peter; et al., (82h:68064)
- Lieberherr, Karl Uniform complexity and digital signatures. (82m:68087)
- Lipshitz, Leonard Some remarks on the Diophantine problem for addition and divisibility. (82a:03011)
- Lischke, Gerhard Two types of properties for complexity measures. (82f:68050)
- Long, Timothy J. On γ -reducibility versus polynomial time many-one reducibility. (82c:68041)
- Loui, Michael C. A space bound for one-tape multidimensional Turing machines. (82i:68052)
- Lovász, László Efficient algorithms: an approach by formal logic. (82e:68042)
- Lynch, Nancy A. Straight-line program length as a parameter for complexity measures. (82e:68009)
(with Blum, Edward K.) Relative complexity of algebras. (82f:68018)
See also Borodin, Allan; et al., (82i:68042)
- Mahr, Bernd See Ehrig, Hartmut, (82m:68083)
- Manders, Kenneth L. See Adleman, Leonard M., (82f:68045)
- Mayr, Ernst W. (with Meyer, Albert R.) The complexity of the finite containment problem for Petri nets. (82f:68061)
- Meyer, Albert R. See Mayr, Ernst W., (82f:68061)
- Monien, Burkhard (with Sudborough, Ivan Hal) Bounding the bandwidth of NP-complete problems. (82h:68067)
- Moore, Daniel J. See Leggett, E. W., Jr., (82m:68085)
- Oppen, Derek C. Reasoning about recursively defined data structures. (82a:68177)
Complexity, convexity and combinations of theories. (82a:03013)
- Petrov, B. N. (with Ulanov, G. M.; Ufjanov, S. V.) Complexity of finite objects and informational control theory. (Russian) (82h:93064)
- Pippenger, Nicholas Computational complexity of algebraic functions. (82m:12001)
- Ruzzo, Walter L. On uniform circuit complexity. (82j:68024)
- Sattler, Jürgen See Comments-Walter, Beate, (82g:94026)
- Schönhage, A. Storage modification machines. (82h:68040)
Partial and total matrix multiplication. (82h:68070)
- Sethi, Ravi See Downey, Peter; et al., (82h:68064)
- Simon, Janos Division in idealized unit cost RAMs. (82i:68030)
- Sipser, Michael See Katseff, Howard P., (82g:68028)
- Snir, Marc On the size complexity of monotone formulas. (82c:68029)
- Springsteel, Frederic Complexity of hypothesis formation problems. (82m:68091)
- Su, Zhe The significance of the "street vendor's load" problem. (Chinese) (82j:68025)
- Sudborough, Ivan Hal See Monien, Burkhard, (82h:68067)
- Tao, Ren Ji On the computational power of automata with time or space bounded by Ackermann's or superexponential functions. (82m:68093)
- Tarasov, S. P. (with Hačijan, L. G.) Boundaries of solutions and algorithmic complexity of systems of convex Diophantine inequalities. (Russian) (82f:68052)
- Tetravšili, M. R. The conjugacy problem for groups with one defining relation and the complexity of Turing calculations. (Russian) (82h:20050)
- Tompa, Martin An extension of Savitch's theorem to small space bounds. (82d:68035)
See also Borodin, Allan; et al., (82i:68042)
- Ulanov, G. M. See Petrov, B. N.; et al., (82h:93064)
- Ufjanov, S. V. See Petrov, B. N.; et al., (82h:93064)
- Waack, Stephan ★Tape complexity of word problems. (82m:20040)
- Wilkie, A. J. Applications of complexity theory to Σ_1 -definability problems in arithmetic. (82h:03085)
- Winograd, Shmuel See Auslander, L., (82g:68039)
- Yacobi, Yacov See Even, Shimon, (82h:68065)
- Yehudai, Amir See Harrison, Michael A., (82e:68076)
- Yesha, Yaacov See Fraenkel, Aviezri S., (82a:68071)
- Computational complexities ★Studies on computational complexities and related topics. (Japanese) (82h:68072)
- Studies on computational complexities and related topics ★Studies on computational complexities and related topics. (Japanese) (82h:68072)
- Symposium:
Studies on Computational Complexities and Related Topics ★Studies on computational complexities and related topics. (Japanese) (82h:68072)

03D20 Recursive functions and relations, subrecursive hierarchies

- Collins, William J. Provably recursive real numbers. 82e:03040
- Dégtér, A. N. A category of partial recursive functions. (Russian) 82a:03037
- Dima, Nelu The Sudan function is universal for the class of primitive recursive functions. (Romanian. English summary) 82k:03061
- Hauck, Jürgen Entscheidungs-invariante Funktionen. (Russian, English and French summaries) 82j:03045
- Kolganov, N. A. Identities in an algebra of recursive functions. (Russian) 82d:03067
- Kosovskii, N. K. Recognition of invariant properties of short algorithms. (Russian. English summary) 82h:03075
- Lorents, P. The Löb-Wainer hierarchy and general recursive functions. (Russian) 82b:03076
- Mašarjan, A. S. On the class of primitive recursive functions definable on finite models. (Russian. Armenian summary) 82i:03052
- McBeth, Rod A generalization of Ackermann's function. 82c:03063
Exponential polynomials of linear height. 82g:03074
A note on exponential polynomials and prime factors. 82i:03053
- Mo, Shao Kui (with Ye, Da Xing) On recursion schemas defining operators. (Chinese. English summary) 82i:03054
- Rogožin, Ju. V. Universal one-place partial recursive functions. (Russian) 82j:03046
- Smoryński, Craig Some rapidly growing functions. 82c:03064
- Verbeek, Rutger On the naturalness of the Grzegorzczak hierarchy. 82e:03041
- Ye, Da Xing See Mo, Shao Kui, 82i:03054

secondary classifications:

- Anghin, Dana Inductive inference of formal languages from positive data. (82a:68135)
- Cousot, Patrick (with Cousot, Radhia) Constructive versions of Tarski's fixed point theorems. (82d:06004)
- Cousot, Radhia See Cousot, Patrick, (82d:06004)
- Danko, Wiktor Definability in algorithmic logic. (82f:68031)
- Howard, W. A. Ordinal analysis of simple cases of bar recursion. (82g:03095)
- Ibarra, Oscar H. (with Leininger, Brian S.) Characterizations of Presburger functions. (82h:68008)
- Jablonskii, S. V. ★Введение в дискретную математику. (Russian) [Introduction to discrete mathematics] (82h:94001)
- Leininger, Brian S. See Ibarra, Oscar H., (82h:68008)
- McAloon, Kenneth Progressions transfinies de théories axiomatiques, formes combinatoires du théorème d'incomplétude et fonctions récursives à croissance rapide. (82g:03098b)
- O'Donnell, Michael A practical programming theorem which is independent of Peano arithmetic. (82i:03066)
- Pogosjan, É. M. Training as a variety of induction inference. (82j:68091)
- Sen, A. H. The axiomatic approach to the theory of algorithms and relative computability. (Russian. English summary) (82h:03087)
- Williams, John H. Formal representations for recursively defined functional programs. (82j:68009)

03D25 Recursively enumerable sets and degrees

- Bernardi, Claudio (with Crociani, Carla) Simple sets and maximal sets in recursion theory. (Italian. English summary) 82g:03075
- Borovov, Ju. V. Four theorems on holographic sets. (Russian) 82j:03047
- Cenzer, Douglas Nongenerable formal languages. 82d:03068
- Crociani, Carla See Bernardi, Claudio, 82g:03075
- Dégtér, A. N. (with Zaharov, D. A.) ★Перечислимые множества. (Russian) [Recursively enumerable sets] 82d:03069
Some results on upper semilattices and m-degrees. (Russian) 82e:03065
- Fejer, Peter A. (with Soare, Robert Irving) The plus-cupping theorem for the recursively enumerable degrees. 82j:03049
- Golumkov, Ju. V. Precomplete classes of algorithms that preserve membership in a set. II. (Russian) 82m:03054
- Lachlan, A. H. (with Soare, Robert Irving) Not every finite lattice is embeddable in the recursively enumerable degrees. 82a:03038
- Lerman, Manuel (with Soare, Robert Irving) d -simple sets, small sets, and degree classes. 82g:03076
- Miller, David P. High recursively enumerable degrees and the antipcupping property. 82j:03048

- Frank, R. On the quotient lattice of the lattice of recursively enumerable sets by the immunity congruence. (Russian. Estonian and English summaries) **82a:03062**
 Selivanov, V. L. Index sets of computable classes of finite sets. (Russian) **82b:03077**
 Soare, Robert Irving. See Lachlan, A. H. **82a:03038**; Lerman, Manuel. **82g:03076** and Fejer, Peter A. **82j:03049**
 Zaharov, D. A. See Dęteń, A. N. **82d:03069**

secondary classifications:

- Abramson, Fred G. Σ_1 -separation. **(82j:03057)**
 Arslanov, M. M. Some generalizations of a fixed-point theorem. (Russian) **(82j:03050)**
 Bessimon, Victor L. Information content characterizations of complexity-theoretic properties. **(82a:03034)**
 Daley, Robert P. The busy beaver method. **(82a:03040)**
 Jantzen, Matthias. The power of synchronizing operations on strings. **(82e:68029)**
 Odifreddi, Piergiorgio. Strong reducibilities. **(82k:03064)**
 Solon, B. Ja. Quasiminimal pF-degrees. (Russian) **(82d:03072)**

03D30 Degrees and reducibilities

- Arslanov, M. M. Some generalizations of a fixed-point theorem. (Russian) **82j:03050**
 Budinas, B. L. The partial ordering of Δ_1^1 -degrees of subsets of the natural numbers. (Russian. English summary) **82b:03078**
 Buharaev, N. R. T-degrees of differences of recursively enumerable sets. (Russian) **82b:03063**
 Dymet, E. Z. Exact bounds of denumerable collections of degrees of difficulty. (Russian) **82d:03070**
 Epstein, Richard L. Initial segments of degrees below θ . **82m:03055**
 Gavrilov, S. Relations between different forms of relative computability of everywhere defined functions. (Russian) **82d:03071**
 Harrington, Leo (with Shore, Richard A.) Definable degrees and automorphisms of \mathcal{Q} . **82g:03077**
 Hodžajanc, M. Ju. Structure of e-degrees. (Russian. Armenian and English summaries) **82a:03039**
 Lerman, Manuel. The degrees of unsolvability: some recent results. **82i:03055**
 Mal'cev, An. A. The structure of an m-jump. (Russian) **82m:03056**
 Nerode, Anil (with Shore, Richard A.) Second order logic and first order theories of reducibility orderings. **82g:03078**
 Odifreddi, Piergiorgio. Trees and degrees. **82b:03038**
 Strong reducibilities. **82k:03064**
 Omandze, R. Š. On bounded Q-reducibility. (Russian. Georgian and English summaries) **82h:03039**
 Poljakov, E. A. Some remarks on relative recursiveness. (Russian) **82i:03056**
 Rozinas, M. G. The semilattice of e-degrees. (Russian) **82i:03057**
 Shore, Richard A. The degrees of unsolvability: global results. **82k:03065**
 See also Harrington, Leo. **82g:03077** and Nerode, Anil. **82g:03078**
 Soare, Robert Irving. Fundamental methods for constructing recursively enumerable degrees. **82j:03051**
 Solon, B. Ja. Quasiminimal pF-degrees. (Russian) **82d:03072**

secondary classifications:

- Adleman, Leonard M. (with Manders, Kenneth L.) Reductions that lie. **(82f:68045)**
 Börger, Egon (with Kleine-Büning, Hans) The r.e. complexity of decision problems for commutative semi-Thue systems with recursive rule set. **(82b:03074)**
 Cenzer, Douglas. Nongenerable formal languages. **(82d:03068)**
 Epstein, Richard L. (with Haas, Richard; Kramer, Richard L.) Hierarchies of sets and degrees below θ . **(82k:03073)**
 Friedman, Sy D. Negative solutions to Post's problem. II. **(82k:03075)**
 Haas, Richard. See Epstein, Richard L.; et al. **(82k:03073)**
 Hrbáček, Karel (with Simpson, Stephen G.) On Kleene degrees of analytic sets. **(82d:03081)**
 Kleine-Büning, Hans. See Börger, Egon. **(82b:03074)**
 Kramer, Richard L. See Epstein, Richard L.; et al. **(82k:03073)**
 Lerman, Manuel (with Soare, Robert Irving) d-simple sets, small sets, and degree classes. **(82g:03076)**
 Manders, Kenneth L. See Adleman, Leonard M. **(82f:68045)**
 Selivanov, V. L. Index sets of computable classes of finite sets. (Russian) **(82b:03077)**
 Simpson, Stephen G. See Hrbáček, Karel. **(82d:03081)**
 Soare, Robert Irving. See Lerman, Manuel. **(82g:03076)**
 Ziegler, Martin. Algebraisch abgeschlossene Gruppen. (English summary) **(82b:20004)**

03D35 Undecidability and degrees of sets of sentences

- Bernardi, Claudio. On the relation provable equivalence and on partitions in effectively inseparable sets. **82m:03057**
 Börger, Egon. The reachability problem for Petri nets and decision problems for Skolem arithmetic. **82b:03079**
 Daley, Robert P. The busy beaver method. **82a:03040**
 Deutsch, Michael. Zur Reduktionstheorie des Entscheidungsproblems. **82f:03037**
 Földes, Stéphane (with Steinberg, Richard) A topological space for which graph embeddability is undecidable. **82d:03073**
 Goldfarb, Warren D. On the Gödel class with identity. **82g:03079**
 Jędrzejowicz, Joanna. One-one degrees of combinatorial systems decision problems. **82c:03066**
 Korec, Ivan. Densities of first order theories. (Slovak and Russian summaries) **82m:03058**
 Lischke, Gerhard. Some considerations about complexity for Mazurkiewicz algorithms. (German and Russian summaries) **82b:03080**
 Steinberg, Richard. See Földes, Stéphane. **82d:03073**

secondary classifications:

- Arslanov, M. M. Some generalizations of a fixed-point theorem. (Russian) **(82j:03050)**
 Bolotov, A. A. On problems of reducibility and expressibility for homogeneous structures with inputs and outputs. (Russian) **(82k:68022)**
 Cherlin, Gregory. Rings of continuous functions: decision problems. **(82e:03019)**
 (with van den Dries, Lou; Macintyre, Angus) Decidability and undecidability theorems for PAC-fields. **(82g:03057)**
 Cherniavsky, J. C. Erratum to: "Function iteration logics and flowchart schemata" [Computing 14 (1975), no. 3, 285–312; MR 53 #14962]. **(82h:68005)**
 Chlebus, Bogdan Stanisław. Decidability and definability results concerning well-orderings and some extensions of first order logic. **(82b:03072)**
 Delon, Françoise. Définition de l'arithmétique dans la théorie des anneaux de séries formelles. (English summary) **(82a:12018)**
 Hensel fields in equal characteristic $p > 0$. **(82g:03058)**
 van den Dries, Lou. See Cherlin, Gregory; et al. **(82g:03057)**
 Epstein, Richard L. Initial segments of degrees below θ . **(82m:03055)**
 Földes, Stéphane (with Sabidussi, Gert) Recursive undecidability of the binding property for finitely presented equational classes. **(82e:08007)**
 Fujii, Mamoru. See Mori, Masaaki; et al. **(82m:08027)**
 Grabowski, Jan. ★Lineare Methoden in der Theorie der Vektoradditionssysteme. III. (German) [Linear methods in the theory of vector addition systems. III] **(82i:68035)**
 Herre, Heinrich (with Seese, Detlef G.) Concerning the monadic theory of the topology of well-orderings and scattered spaces. **(82f:03030)**
 Karpinski, Marek. ★The ultimate equivalence of iterated homomorphisms is recursively unsolvable. **(82j:68027)**
 Kasami, Tadao. See Mori, Masaaki; et al. **(82m:68027)**
 Macintyre, Angus. See Cherlin, Gregory; et al. **(82g:03057)**
 Montagna, Franco. The undecidability of the first-order theory of diagonalizable algebras. **(82i:03078)**
 Mori, Masaaki (with Taniguchi, Kenichi; Kasami, Tadao; Fujii, Mamoru) Formal verification of a class of concurrent programs. **(82m:68027)**
 Nerode, Anil (with Smith, Rick L.) The undecidability of the lattice of recursively enumerable subspaces. **(82i:03060)**
 (with Shore, Richard A.) Second order logic and first order theories of reducibility orderings. **(82g:03078)**
 Nigjan, S. A. Reducibility to free schemes. **(82f:68011)**
 Sabidussi, Gert. See Földes, Stéphane. **(82e:08007)**
 Seese, Detlef G. See Herre, Heinrich. **(82f:03030)**
 Semenov, A. L. An interpretation of free algebras in free groups. (Russian) **(82b:08011)**
 Shore, Richard A. See Nerode, Anil. **(82g:03078)**
 Smith, Rick L. See Nerode, Anil. **(82i:03060)**
 Taniguchi, Kenichi. See Mori, Masaaki; et al. **(82m:68027)**
 Taylor, Walter. Some universal sets of terms. **(82h:08005)**

03D40 Word problems, etc. [See also 06B25, 08A50, 20F10.]

- Cohen, Daniel E. Degree problems for modular machines. **82c:03066**
 Goldfarb, Warren D. The undecidability of the second-order unification problem. **82c:03067**
 Huber-Dyson, Verena. A reduction of the open sentence problem for finite groups. **82j:03052**

secondary classifications:

- Adjan, S. I. Classifications of periodic words and their application in group theory. **(82b:20048)**
 Baumslag, Gilbert. Problem areas in infinite group theory for finite group theorists. **(82c:20063)**
 (with Dyer, Eldon; Miller, Charles F., III) On the integral homology of finitely presented groups. **(82c:20089)**
 (with Cannonito, Frank B.; Miller, Charles F., III) Computable algebra and group embeddings. **(82c:20042)**
 (with Cannonito, Frank B.; Miller, Charles F., III) Some recognizable properties of solvable groups. **(82k:20061)**
 Belegradek, O. V. Decidable fragments of universal theories and existentially closed models. (Russian) **(82d:20033)**
 Bokut', L. A. Mal'cev's problem and groups with a normal form. **(82c:20064)**
 Book, Ronald V. The undecidability of a word problem: on a conjecture of Strong, Maggiori-Schettini and Rosen. **(82h:03035)**
 Cannonito, Frank B. Two decidable Markov properties over a class of solvable groups. (Russian summary) **(82j:20072)**
 See also Baumslag, Gilbert; et al. **(82c:20042)** and **(82k:20061)**
 (Collins, Donald J.) See Bokut', L. A. **(82c:20064)**
 Comerford, Leo P., Jr. Quadratic equations over small cancellation groups. **(82f:20060)**
 (with Edmunds, Charles C.) Quadratic equations over free groups and free products. **(82k:20060)**
 Cullik, K., II (with Karhumäki, Juhani) On the equality sets for homomorphisms on free monoids with two generators. (French summary) **(82f:68076)**
 Dô Long Vân. Problèmes des mots et de conjugaison pour une classe de groupes de présentation finie. (English summary) **(82f:20061)**
 Dyer, Eldon. See Baumslag, Gilbert; et al. **(82c:20089)**
 Edmunds, Charles C. See Comerford, Leo P., Jr. **(82k:20060)**
 Földes, Stéphane (with Singh, N. M.) A nonconstructible projective plane. **(82d:03052)**
 Gerhard, J. A. (with Petrich, Mario) The word problem for orthogroups. **(82m:20063)**
 Grigorev, D. Ju. Complexity of "wild" matrix problems and of the isomorphism of algebras and graphs. (Russian. English summary) **(82k:03060)**
 Grunewald, Fritz J. (with Segal, Daniel) Some general algorithms. I. Arithmetic groups. **(82d:20048a)**
 (with Segal, Daniel) Some general algorithms. II. Nilpotent groups. **(82d:20048b)**

- Harlampović, O. G. A finitely presented solvable group with unsolvable word problem. (Russian) (82m:20036)
- Hickin, Kenneth Keller (with Macintyre, Angus) Algebraically closed groups: embeddings and centralizers. (82c:20065)
- Bounded HNN presentations. (82j:20059)
- Horadam, K. J. The word problem and related results for graph product groups. (82c:20043)
- A quick test for nonisomorphism of one-relator groups. (82j:20069)
- Jabani, G. G. The word problem for some groups of the variety N_2A . (Russian) (82m:20037)
- Jura, Andrzej Some remarks on nonexistence of an algorithm for finding all ideals of a given finite index in a finitely presented semigroup. (82f:20083)
- Karhumäki, Juhani See Culik, K., II, (82f:68076)
- Kasinev, E. V. An algorithm for the solution of the conjugacy problem for certain semigroups. (Russian) (82h:20068)
- Kublanovskii, S. I. Finite approximability of prevarieties of semigroups with respect to predicates. (Russian) (82g:20084)
- Lisovik, L. P. Equivalence problem for finitely ambiguous finite automata over semigroups. (82b:68045)
- Strict sets and finite semigroup coverings. (82c:20080)
- See also Red'ko, V. N., (82b:20101)
- Macintyre, Angus See Hickin, Kenneth Keller, (82c:20065)
- Makanin, G. S. Equations on a free semigroup. (Russian) (82b:20081)
- Markšaitis, H. Solvability of the word problem for certain groups. (Russian. Lithuanian and English summaries) (82c:20067)
- McCleary, Stephen H. A solution of the word problem in free normal-valued lattice-ordered groups. (82b:06026)
- Miller, Charles F., III The word problem in quotients of a group. (82i:20048)
- See also Baumslag, Gilbert; et al., (82c:20089); (82c:20042) and (82c:20061)
- Pavlov, R. D. On the problem of recognizing homomorphisms of finitely presented groups. (Russian) (82d:20034)
- Perraud, Jean Sur le problème des mots des quotients de groupes et produits libres. (English summary) (82c:20043)
- Sur la condition de petite simplification $C'(1/6)$ dans un produit libre amalgamé. (English summary) (82c:20068)
- Petrich, Mario See Gerhard, J. A., (82m:20063)
- Rassias, George M. Stallings homomorphisms and the simply connectedness problem. (82i:57001)
- Red'ko, V. N. (with Lisovik, L. P.) Regular events in semigroups. (Russian) (82b:20101)
- Rips, E. Another characterization of finitely generated groups with a solvable word problem. (82m:20038)
- Rollov, E. V. Subsemigroups of a class of semigroups. (Russian) (82c:20068)
- Romanovskii, N. S. The embedding problem for abelian-by-nilpotent groups. (Russian) (82c:20069)
- Segal, Daniel See Grunewald, Fritz J., (82d:20048)
- Singhi, N. M. See Földes, Stéphane, (82d:03052)
- Sirvanjan, V. L. The word problem for groups with a recursive set of defining relations of the form $A^n = 1$. (Russian. Armenian summary) (82j:20073)
- Stillwell, John C. The word problem and the isomorphism problem for groups. (82m:20039)
- Tamura, Saburo On the word problem for lo-semigroups. (82g:06026)
- Waack, Stephan ★Tape complexity of word problems. (82m:20040)

03D45 Theory of numerations, effectively presented structures [See also 03C57.]

- Asatryan, O. S. On positive equivalences. (Russian. Armenian summary) 82k:03067
- On creative equivalences. (Russian. Armenian and English summaries) 82g:03080
- Dętey, A. N. Reducibilities of numerations. (Russian) 82a:03041
- Dobrica, V. P. Constructivizable abelian groups. (Russian) 82c:03058
- Drobotun, B. N. See Gončarov, S. S., 82k:03068
- Dzgoev, V. D. See Gončarov, S. S., 82g:03082
- Falkinger, Josef Reduzierbarkeit von berechenbaren Numerierungen von P_1 . 82b:03081a
- Universalität von berechenbaren Numerierungen von partiell rekursiven Funktionen. 82b:03081b
- Gončarov, S. S. Autostability of models and abelian groups. (Russian) 82g:03081
- (with Dzgoev, V. D.) Autostability of models. (Russian) 82g:03082
- Computable univalent numerations. (Russian) 82m:03059
- (with Drobotun, B. N.) Numerations of saturated and homogeneous models. (Russian) 82k:03068
- Groups with a finite number of constructivizations. (Russian) 82g:03083
- Kierstead, Henry A. An effective version of Dilworth's theorem. 82c:03069
- Krupskii, V. N. Completely enumerable sets in effective metric spaces. (Russian. English summary) 82a:03042
- Kudabergenov, K. Z. Constructivizable models of undecidable theories. (Russian) 82b:03040
- La Roche, Peter Effective Galois theory. 82j:03053
- Lerman, Manuel On recursive linear orderings. 82c:03059
- Lin, Charlotte Recursively presented abelian groups: effective p -group theory. I. 82j:03054
- Metakides, G. (with Nerode, Anil) Effective content of field theory. 82b:03082
- Nerode, Anil (with Smith, Rick L.) The undecidability of the lattice of recursively enumerable subspaces. 82i:03060
- See also Metakides, G., 82b:03082
- Reiser, Angelika (with Weihrauch, Klaus) Natural numberings and generalized computability. (German and Russian summaries) 82b:03083
- Rimmel, Jeffrey B. Recursive Boolean algebras with recursive atoms. 82j:03055
- Smith, Rick L. See Nerode, Anil, 82i:03060
- Stoltenberg-Hansen, Viggo (with Tucker, J. V.) Computing roots of unity in fields. 82d:03074

- Tucker, J. V. See Stoltenberg-Hansen, Viggo, 82d:03074
- Weihrauch, Klaus See Reiser, Angelika, 82b:03083

secondary classifications:

- Arslanov, M. M. Some generalizations of a fixed-point theorem. (Russian) (82j:03050)
- Baumslag, Gilbert (with Cannonito, Frank B.; Miller, Charles F., III) Computable algebra and group embeddings. (82c:20042)
- Blum, Edward K. See Lynch, Nancy A., (82f:68018)
- Cannonito, Frank B. See Baumslag, Gilbert; et al., (82c:20042)
- Crossley, John N. Reminiscences of logicians. II. (82m:03060)
- Dętey, A. N. A category of partial recursive functions. (Russian) (82a:03037)
- (Dekker, Jim) See Crossley, John N., (82m:03060)
- Ersöv, Ju. L. ★Проблемы разрешимости и конструктивные модели. (Russian) [Decision problems and constructivizable models] (82h:03069)
- Gončarov, S. S. The problem of the number of nonautoequivalent constructivizations. (Russian) (82k:03046)
- Hauck, Jürgen Berechenbarkeit in topologischen Räumen mit rekursiver Basis. (82j:03078)
- Hisamiev, N. G. Criterion for constructivizability of a direct sum of cyclic p -groups. (Russian. Kazakh summary) (82b:03042)
- Kosovskii, N. K. Recognition of invariant properties of short algorithms. (Russian. English summary) (82b:03075)
- Lynch, Nancy A. Straight-line program length as a parameter for complexity measures. (82c:68009)
- (with Blum, Edward K.) Relative complexity of algebras. (82f:68018)
- (Manaster, Alfred B.) See Crossley, John N., (82m:03060)
- (McLaughlin, Tom) See Crossley, John N., (82m:03060)
- Miller, Terrence Vaught's theorem recursively revisited. (82d:03053)
- Miller, Charles F., III See Baumslag, Gilbert; et al., (82c:20042)
- (Nerode, Anil) See Crossley, John N., (82m:03060)
- Rimmel, Jeffrey B. Recursively categorical linear orderings. (82j:03037)
- Smyth, Michael B. Computability in categories. (82c:68055)
- Tucker, J. V. Computability and the algebra of fields: some affine constructions. (82a:03027)

03D50 Recursive equivalence types of sets and structures, isol

- Barback, Joseph On regressive isol and their differences. 82k:03070
- Hyper-torre isol and an arithmetic property. 82k:03071
- Crossley, John N. Reminiscences of logicians. II. 82m:03060
- Dekker, Jim Recursive equivalence types and cubes. 82j:03056
- Automorphisms of ω -cubes. 82g:03084
- See also Crossley, John N., 82m:03060
- Ellentuck, Erik Hyper-torre isol. 82f:03038
- Manaster, Alfred B. See Rimmel, Jeffrey B., 82b:03041 and Crossley, John N., 82m:03060
- McLaughlin, Tom Intersection types and the terms of a regressive sum. 82k:03072
- See also Crossley, John N., 82m:03060
- (Nerode, Anil) See Crossley, John N., 82m:03060
- Rimmel, Jeffrey B. (with Manaster, Alfred B.) Co-simple higher-order indecomposable isol. 82b:03041
- Watnick, Richard Constructive and recursive scattered order types. 82b:03042

03D55 Hierarchies

- Epstein, Richard L. (with Haas, Richard; Kramer, Richard L.) Hierarchies of sets and degrees below $0'$. 82k:03073
- Haas, Richard See Epstein, Richard L.; et al., 82k:03073
- Hinman, Peter G. ★Recursion-theoretic hierarchies. 82b:03084
- Kanovei, V. G. The set of all analytically definable sets of natural numbers can be analytically definable. (Russian) 82a:03043
- Kramer, Richard L. See Epstein, Richard L.; et al., 82k:03073
- Paris, J. B. See Wilkie, A. J., 82k:03074
- Simpson, Stephen G. The hierarchy based on the jump operator. 82a:03044
- Wilkie, A. J. Applications of complexity theory to Σ_0 -definability problems in arithmetic. 82b:03085
- (with Paris, J. B.) Models of arithmetic and the rudimentary sets. 82k:03074

secondary classifications:

- Carpenter, Amos J. For any admissible ordinal α , Kripke's α -recursive functions are exactly Machover's α -recursive functions. (82g:03085)
- Harrington, Leo (with Sami, R.) Equivalence relations, projective and beyond. (82d:03080)
- Kechris, Alexander S. A note on Wadge degrees. (82j:03061)
- Souslin cardinals, κ -Souslin sets and the scale property in the hyperprojective hierarchy. (82k:03079)
- See also Martin, Donald A., (See 82m:03063)
- Martin, Donald A. (with Kechris, Alexander S.) Infinite games and effective descriptive set theory. (See 82m:03063)
- Moschovakis, Yiannis N. ★Descriptive set theory. (82c:03002)
- Sami, R. See Harrington, Leo, (82d:03080)
- Steel, John R. A note on analytic sets. (82b:03092)
- Analytic sets ★Analytic sets. (82m:03063)
- Conference:
- Analytic Sets ★Analytic sets. (82m:03063)
- London ★Analytic sets. (82m:03063)

03D60 Recursion theory on ordinals, admissible sets, etc.

- Abramson, Fred G. Σ_1 -separation. **82j:03057**
 Carpenter, Amos J. For any admissible ordinal α , Kripke's α -recursive functions are exactly Machover's α -recursive functions. **82g:03085**
 Di Paola, Robert A. A lift of a theorem of Friedman: a Banach-Mazur functional that coincides with no α -recursive functional on the class of α -recursive functions. **82h:03043**
 Friedman, Sy D. Negative solutions to Post's problem. II. **82h:03075**
 Krawczyk, Adam. Patterns of projecta. **82e:03042**
 Shore, Richard A. Some constructions in α -recursion theory. **82e:03043**
 Yang, Dong Ping. α -splitting theorem restricted to Δ_1^2 sets. (Chinese) **82h:03044**

secondary classifications:

- Hinman, Peter G. ★Recursion-theoretic hierarchies. **(82h:03084)**
 Stoltenberg-Hansen, Viggo. On computational complexity in weakly admissible structures. **(82a:03036)**

03D65 Higher-type and set recursion theory

- Dvornikov, S. G. C-degrees of continuous, everywhere defined functionals. (Russian) **82k:03076**
 Kierstead, David P. A semantics for Kleene's j -expressions. **82j:03039**
 Luckhardt, H. A limit for higher recursion theory. **82c:03068**
 Normann, Dag. A classification of higher type functionals. **82e:03044**
 ★Recursion on the countable functionals. **82d:03075**
 The recursion theory of the continuous functionals. **82h:03045**
 (with Wainer, Stan S.) The 1-section of a countable functional. **82f:03040**
 Sacks, Gerald E. Post's problem, absoluteness and recursion in finite types. **82g:03086**
 Wainer, Stan S. See Normann, Dag. **82f:03040**

secondary classifications:

- Hinman, Peter G. ★Recursion-theoretic hierarchies. **(82h:03084)**
 Kolaitis, Phokion G. Model-theoretic characterizations in generalized recursion theory. **(82j:03059)**
 Takano, Michio. On Gödel's primitive recursive functionals. (Japanese) **(82j:03074)**

03D70 Inductive definability

- Cenzer, Douglas (with Mauldin, R. Daniel). Inductive definability: measure and category. **82h:03086**
 Grassin, Jacques. Δ_1^1 -good inductive definitions over the continuum. **82j:03058**
 Mauldin, R. Daniel. See Cenzer, Douglas. **82h:03086**

secondary classifications:

- Cenzer, Douglas. Nongenerable formal languages. **(82d:03068)**
 Kolaitis, Phokion G. Model-theoretic characterizations in generalized recursion theory. **(82j:03059)**
 Moldestad, J. (with Stoltenberg-Hansen, Viggo; Tucker, J. V.) Finite algorithmic procedures and inductive definability. **(82d:03077a)**
 (with Stoltenberg-Hansen, Viggo; Tucker, J. V.) Finite algorithmic procedures and computation theories. **(82d:03077b)**
 Stoltenberg-Hansen, Viggo. See Moldestad, J.; et al., **(82d:03077)**
 Tucker, J. V. See Moldestad, J.; et al., **(82d:03077)**

03D75 Abstract and axiomatic recursion theory

- Fitting, Melvin C. An axiomatic approach to computers. **82k:03077**
 Ivanov, L. L. Iterative operator spaces. (Russian) **82d:03076a**
 Some examples of iterative operator spaces. (Russian) **82d:03076c**
 Kolaitis, Phokion G. Model-theoretic characterizations in generalized recursion theory. **82j:03059**
 Moldestad, J. (with Stoltenberg-Hansen, Viggo; Tucker, J. V.) Finite algorithmic procedures and inductive definability. **82d:03077a**
 (with Stoltenberg-Hansen, Viggo; Tucker, J. V.) Finite algorithmic procedures and computation theories. **82d:03077b**
 Sen, A. H. The axiomatic approach to the theory of algorithms and relative computability. (Russian. English summary) **82b:03087**
 Skordev, D. G. Semicombinatorial spaces. (Russian) **82d:03076b**
 Stefani, Stefano. Recursive functions with measurable oracles: an approach to a probabilistic recursion theory. (Italian summary) **82h:03046**
 Stoltenberg-Hansen, Viggo. See Moldestad, J.; et al., **82d:03077**
 Tucker, J. V. Computing in algebraic systems. **82h:03047**
 See also Moldestad, J.; et al., **82d:03077**

secondary classifications:

- Nivat, Maurice. Infinite words, infinite trees, infinite computations. **(82e:68015)**
 Smyth, Michael B. Computability in categories. **(82c:68055)**

03D80 Applications

- Goralčík, Pavel. See Goralčíková, Alla; et al., **82h:03088**
 Goralčíková, Alla (with Goralčík, Pavel; Koubek, Václav). Testing of properties of finite algebras. **82h:03088**
 Koubek, Václav. See Goralčíková, Alla; et al., **82h:03088**
 Riccardi, Gregory A. The independence of control structures in abstract programming systems. **82m:03061**

Smith, Carl H. Applications of classical recursion theory to computer science. **82b:03089**

secondary classifications:

- Apt, Krzysztof R. Recursive assertions and parallel programs. **(82h:68009)**
 de Bakker, Jacob. ★Mathematical theory of program correctness. **(82g:68016)**
 Baumsdag, Gilbert (with Dyer, Eldon; Miller, Charles F., III). On the integral homology of finitely presented groups. **(82c:20089)**
 (de Bruin, Arie). See de Bakker, Jacob, **(82g:68016)**
 Cartwright, Robert (with McCarthy, John). First order programming logic. **(82e:68030)**
 Dyer, Eldon. See Baumsdag, Gilbert; et al., **(82c:20089)**
 Golunkov, Ju. V. Precomplete classes of algorithms that preserve membership in a set. II. (Russian) **(82m:03054)**
 (Hajnal, András). See Péter, Rózsa, **(82m:68013)**
 (Juhász, István). See Péter, Rózsa, **(82m:68013)**
 McCarthy, John. See Cartwright, Robert, **(82e:68030)**
 Miller, Charles F., III. See Baumsdag, Gilbert; et al., **(82c:20089)**
 Péter, Rózsa. ★Recursive functions in computer theory. **(82m:68013)**
 Rassias, George M. Stallings homomorphisms and the simply connectedness problem. **(82i:57001)**
 Tucker, J. V. Computing in algebraic systems. **(82h:03047)**
 (Zucker, Jefferey). See de Bakker, Jacob, **(82g:68016)**

03D99 None of the above, but in this section

secondary classifications:

- Arnold, André (with Nivat, Maurice). Formal computations of nondeterministic recursive program schemes. **(82m:68019)**
 Bertoni, Alberto (with Mauri, Giancarlo; Miglioli, P. A.) Towards a theory of abstract data types: a discussion on problems and tools. **(82c:68013)**
 Joseph, Deborah (with Young, Paul). Independence results in computer science? **(82m:68060)**
 Mauri, Giancarlo. See Bertoni, Alberto; et al., **(82c:68013)**
 Miglioli, P. A. See Bertoni, Alberto; et al., **(82c:68013)**
 Nivat, Maurice. See Arnold, André, **(82m:68019)**
 Smoryński, Craig. Calculating self-referential statements. **(82g:03099)**
 Sokolowski, Stefan. Programs as term transformers. **(82m:68030)**
 Young, Paul. See Joseph, Deborah, **(82m:68060)**

03Exx Set theory [See also 04-XX.]

secondary classifications:

- Kunen, Kenneth. ★Set theory. **(82f:03001)**

03E05 Combinatorial set theory

- Devlin, Keith J. Infinite trees and the axiom of constructibility. **82h:03048**
 Máté, Attila. A partition relation for Souslin trees. **82k:03078**
 Taylor, Alan D. On saturated sets of ideals and Ulam's problem. **82a:03045**
 Todorčević, Stevo B. Trees, subtrees and order types. **82m:03062**

secondary classifications:

- Balcar, Bohuslav (with Simon, Petr; Vojtáš, Peter). Refinement properties and extensions of filters in Boolean algebras. **(82k:06014)**
 Bonnet, R. Very strongly rigid Boolean algebras, continuum discrete set condition, countable antichain condition. I. **(82c:06025)**
 Gitik, Moti. On nonminimal p -points over a measurable cardinal. **(82j:03066)**
 Grzegorek, Edward. On saturated sets of Boolean rings and Ulam's problem on sets of measures. **(82k:04006)**
 Shelah, Saharon. On successors of singular cardinals. **(82d:03079)**
 Simon, Petr. See Balcar, Bohuslav; et al., **(82k:06014)**
 Todorčević, Stevo B. Very strongly rigid Boolean algebras. **(82k:06017)**
 Vojtáš, Peter. See Balcar, Bohuslav; et al., **(82k:06014)**

03E10 Ordinal and cardinal numbers

- Felscher, Walter. Eine weitreichende Wohlordnung der natürlichen Zahlen. **82d:03078**
 Larson, Jean A. (with Laver, Richard; McNulty, George F.) Square-free and cube-free colorings of the ordinals. **82c:03069**
 Laver, Richard. See Larson, Jean A.; et al., **82c:03069**
 McNulty, George F. See Larson, Jean A.; et al., **82c:03069**
 Shelah, Saharon. On successors of singular cardinals. **82d:03079**
 A note on cardinal exponentiation. **82c:03070**
 Wolfsdorf, Kurt. Der Beweis eines Satzes von G. Chodnovsky. (English summary) **82c:03071**

03E15 Descriptive set theory

- Becker, Howard S. Thin collections of sets of projective ordinals and analogs of L . **82g:03087**
 Burgess, John P. Careful choices—a last word on Borel selectors. **82h:03049**
 Harrington, Leo (with Sami, R.). Equivalence relations, projective and beyond. **82d:03080**
 Hrbáček, Karel (with Simpson, Stephen G.). On Kleene degrees of analytic sets. **82d:03081**
 Jayne, John E. See Rogers, C. Ambrose. (See **82m:03063**)
 Kanovei, V. G. Some problems of descriptive set theory and the connection between constructibility and definability. (Russian) **82h:03050**
 Kechris, Alexander S. Recent advances in the theory of higher level projective sets. **82h:03090**

Homogeneous trees and projective scales. **82j:03060**

A note on Wadge degrees. **82j:03061**

Souslin cardinals, κ -Souslin sets and the scale property in the hyperprojective hierarchy. **82k:03079**

See also Martin, Donald A., (See **82m:03063**)

Louveau, Alain ★Ensembles analytiques et boréliens dans les espaces produits. (French) [Analytic and Borel sets in product spaces] **82j:03062**

Martin, Donald A. (with Kechris, Alexander S.) Infinite games and effective descriptive set theory. (See **82m:03063**)

Rogers, C. Ambrose (with Jayne, John E.) K -analytic sets. (See **82m:03063**)

Sami, R. See Harrington, Leo, **82d:03080**

Simpson, Stephen G. See Hrbáček, Karel, **82d:03081**

Steel, John R. Analytic sets and Borel isomorphisms. **82h:03091**

A note on analytic sets. **82h:03092**

Stern, Jacques Perfect set theorems for analytic and coanalytic equivalence relations. **82a:03046**

Analytic sets ★Analytic sets. **82m:03063**

Asterisque See Louveau, Alain, **82j:03062**

Conference:

Analytic Sets ★Analytic sets. **82m:03063**

London ★Analytic sets. **82m:03063**

secondary classifications:

Becker, Howard S. (with Moschovakis, Yiannis N.) Measurable cardinals in playful models. (See **82e:03052**)

Blackwell, David Borel sets via games. (See **82c:28001**)

Cenzer, Douglas (with Mauldin, R. Daniel) Inductive definability: measure and category. (See **82b:03086**)

Dellacherie, Claude Un cours sur les ensembles analytiques. (See **82m:03063**)

Capacities and analytic sets. (See **82j:54085**)

Friedman, Harvey (with Talagrand, Michel) Un ensemble singulier. (English summary) (See **82d:28002**)

Hoffmann-Jørgensen, J. See Topsoe, F., (See **82m:03063**)

Hořčevnikova, N. N. The sum of less than continuum many closed U -sets. (Russian. English summary) (See **82k:54063**)

(Kechris, Alexander S.) See Seminar: Cabal, (See **82c:03002**)

(Martin, Donald A.) See Seminar: Cabal, (See **82c:03002**)

Mauldin, R. Daniel See Cenzer, Douglas, (See **82b:03086**)

Moschovakis, Yiannis N. ★Descriptive set theory. (See **82c:03002**)

See also Becker, Howard S., (See **82e:03052**) and Seminar: Cabal, (See **82c:03002**)

Mundici, Daniele Ergodic undefinability in set theory and recursion theory. (See **82h:03057**)

Ostaszewski, Adam J. (with Telgarsky, Rastislav) Topological games and analytic sets. II. (See **82m:54039**)

Talagrand, Michel See Friedman, Harvey, (See **82d:28002**)

Telgarsky, Rastislav See Ostaszewski, Adam J., (See **82m:54039**)

Topsoe, F. (with Hoffmann-Jørgensen, J.) Analytic spaces and their application. (See **82m:03063**)

Logic ★Cabal Seminar 77-79. (See **82c:03002**)

Seminar:

Cabal ★Cabal Seminar 77-79. (See **82c:03002**)

Caltech-UCLA Logic ★Cabal Seminar 77-79. (See **82c:03002**)

03E20 Other classical set theory

Lambert, William M. On recursion with very large objects. (Spanish. English summary) **82k:03080**

secondary classifications:

Hehner, Eric C. R. Bunch theory: a simple set theory for computer science. (See **82d:68007**)

03E25 Axiom of choice and related propositions

Andréka, Hajnal (with Németi, István) HSPK is equational class, without the axiom of choice. **82k:03081**

Flannagan, T. B. Expansions of models of ZFC. **82f:03041**

Németi, István See Andréka, Hajnal, **82k:03081**

secondary classifications:

Anapolitanos, D. A. Automorphisms of finite order and the axiom of choice. (See **82k:03049**)

David, René A result of relative consistency about the predicate $WO(\delta, x)$. (See **82h:03095**)

Freyd, Peter The axiom of choice. (See **82i:03079**)

Hickman, John L. Some observations concerning medial fields. (See **82e:12037**)

Höft, Hartmut (with Howard, P. E.) Representing multi-algebras by algebras, the axiom of choice, and the axiom of dependent choice. (See **82j:08007**)

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Becker, Howard S. Thin collections of sets of projective ordinals and analogs of L . (82g:03087)

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 Kofler, Eduard (with Menges, Günter) Über unscharfe Mengen (nicht im Sinne Zadehs). (English, French and Russian summaries) **(82a:60010)**
 Korovin, S. Ja. See Melihov, A. N.; et al., **(82m:94074)**
 Kuroki, Nobuaki On fuzzy ideals and fuzzy bi-ideals in semigroups. **(82e:20076)**
 Kuz'min, V. B. (with Ovchinnikov, S. V.) Group decisions. I. In arbitrary spaces of fuzzy binary relations. **(82e:90013a)**
 (with Ovchinnikov, S. V.) Design of group decisions. II. In spaces of partial order fuzzy relations. **(82e:90013b)**
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 Liu, Guo Han Some transforming relations among the pansystem logic spaces with soft algebra shadow system. (Chinese. English summary) **(82j:03030)**
 Liu, Ying Ming Compactness and Tikhonov's theorem in fuzzy topological spaces. (Chinese) **(82j:54008)**
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 Martin, Harold W. Weakly induced fuzzy topological spaces. **(82h:54003)**
 Melihov, A. N. (with Korovin, S. Ja.; Celyh, A. N.) Some principles of program realization for fuzzy control algorithms. (Russian) **(82m:94074)**
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 Negoită, C. V. ★ Fuzzy systems. **(82i:93002)**
 Nie, Yi Yi Pansystem logic conservations of Δ fuzzy sets. (Chinese. English summary) **(82c:68034)**
 Nojiri, H. On fuzzy-fuzzy team decision problems. **(82a:90018)**
 Oguntade, Olufermi O. (with Gero, John S.) Evaluation of architectural design profiles using fuzzy sets. **(82h:90069)**

- Oliero, A. (with Freire, E.) The structure of relations in personnel management. (82e:92053)
- Ostaszewicz, Walenty A new approach to fuzzy programming. (82m:68011)
- Ovchinnikov, S. V. See Kuz'min, V. B. (82e:90013)
- Pedrycz, Witold An approach to the analysis of fuzzy systems. (82e:93003)
- Ponsard, Claude An application of fuzzy subsets theory to the analysis of the consumer's spatial preferences. (82h:90009)
- Prade, Henri M. An outline of fuzzy or possibilistic models for queuing systems. (82f:60224)
- Pu, Bao Ming (with Liu, Ying Ming) Fuzzy topology. I. Neighborhood structure of a fuzzy point and Moore-Smith convergence. (82e:54009a)
- (with Liu, Ying Ming) Fuzzy topology. II. Product and quotient spaces. (82e:54009b)
- Puhov, V. V. See Drobysev, Ju. P., (82e:68061)
- Puri, Madan L. (with Ralescu, Dan A.) Différentielle d'une fonction floue. (English summary) [Differential of a fuzzy function] (82m:58006)
- Ralescu, Dan A. (with Adams, Gregory) The fuzzy integral. (82j:28005)
- See also Puri, Madan L., (82m:58006)
- da Rocha, Armando Freitas Neural fuzzy point processes. (82e:92020)
- Rodabaugh, S. E. The Hausdorff separation axiom for fuzzy topological spaces. (82e:54021)
- A lattice of continuities for fuzzy topological spaces. (82e:54005)
- Suitability in fuzzy topological spaces. (82e:54004)
- Rouse, William B. ★ Systems engineering models of human-machine interaction. (82h:90042)
- Samoilenko, Stanislav I. Optimization problems in computer network design. (82f:68010)
- Sanchez, E. Medical diagnosis and composite fuzzy relations. (82h:92008)
- Sarkar, Mira On fuzzy topological spaces. (82h:54005)
- Scheffe, Peter On foundations of reasoning with uncertain facts and vague concepts. (82g:03040)
- Seljugin, A. A. See Kaipov, V. H., (82e:90008)
- Smets, Philippe Medical diagnosis: fuzzy sets and degrees of belief. (82h:90017)
- Stachowicz, Marian S. See Kania, Aleksander A.; et al., (82k:93055)
- Stein, William E. (with Talati, Kirit) Convex fuzzy random variables. (82k:60041)
- (Stognii, A. O.) See Data banks and information retrieval systems. (82g:68003)
- Talati, Kirit See Stein, William E., (82k:60041)
- Tanaka, Kokichi See Fukami, Satoru; et al., (82g:03039)
- Voxman, William L. See Goetschel, Roy H., Jr., (82g:54025)
- Wagner, Wolfgang A fuzzy model of concept representation in memory. (82f:92051)
- Windham, Michael P. See Bezdek, James C.; et al., (82a:68166)
- Wu, Xue Mou Studies and applications of pansystems analysis. Ia. A brief survey of pansystems analysis. (Chinese) (82j:93002a)
- Studies and applications of pansystems analysis. Ib. A brief survey of pansystems analysis. (Chinese) (82j:93002b)
- Some problems concerning pansystems analysis and fuzziness of vision. (Chinese. English summary) (82f:92055)
- Studies and applications of pansystems analysis. IV. Pansystem observability, pansystem logic and fuzziness. (Chinese. English summary) (82j:93002d)
- Pansystems analysis—a new exploration of interdisciplinary investigation. Studies and applications of pansystems analysis. III. (Chinese. English summary) (82j:93002c)
- See also Yu, Hong Za; et al., (82a:68176) and Zhu, Yuan Zhao, (82d:03037)
- Yu, Hong Za (with Li, Chu Lin; Wu, Xue Mou) Binary comparison average method for fuzzy pattern recognition. (Chinese. English summary) (82a:68176)
- Zadeh, Lotfi A. A fuzzy-algorithmic approach to the definition of complex or imprecise concepts. (82k:68021)
- Fuzzy sets and information granularity. (82a:94136)
- See also Bezdek, James C., (82j:68090)
- Zhu, Yuan Zhao (with Wu, Xue Mou) Pansystem analysis of dynamic yinyang logic and fuzziness. I. (Chinese. English summary) (82d:03037)
- Data banks and information retrieval systems ★ Базы данных и информационно-поисковые системы. (Russian) [Data bases and information retrieval systems] (82g:68003)

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- Conant, Roger C. Set-theoretic structure modelling. (82f:68102)
- Dubois, Didier (with Prade, Henri M.) ★ Fuzzy sets and systems. (82e:03074)
- Kleinberg, Eugene M. A theory of random numbers. (82d:03084)
- Prade, Henri M. See Dubois, Didier, (82e:03074)
- (Zadeh, Lotfi A.) See Dubois, Didier; et al., (82e:03074)

03E99 None of the above, but in this section

secondary classifications:

- Stenius, Erik Sets. II. (82k:03009)
- Yasumoto, Masahiro Classes on ZF models. (82d:03057)

03Fxx Proof theory and constructive mathematics

- Schütte, Kurt Proof theory. (See 82f:03002)
- Vogel, Helmut Der finite Standpunkt in Hilberts Programm. (82h:03064)

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- Kogan-Bernstein, L. M. Simplification of Gentzen's reductions for classical arithmetic. (Russian. English summary) (82k:03089)

- Kuzičev, A. A. (with Kuzičev, A. S.) The embedding of formal arithmetic in combinatorially complete systems. (Russian) (82k:03090)
- Kuzičev, A. S. See Kuzičev, A. A., (82k:03090)
- Raggio, Andrés R. A proof-theoretic analysis of da Costa's C_2^* . (82a:03055)
- Rogava, M. G. On the sequential version of the propositional fragment of the first-order calculus of terms. (Russian. Georgian and English summaries) (82m:03065)
- Tosi, Piero Intuitive proofs and first-order derivations: some notes on the metamathematics of first-order number theory. (82j:03073)

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- Diller, Justus Modified realization and the formulae-as-types notion. (82g:03093)
- Gandy, Robin Proofs of strong normalization. (82i:03024)
- Gentzen, Gerhard Investigations into logical deduction. I. (Japanese) (82m:01080a)
- Investigations into logical deduction. II. (Japanese) (82m:01080b)
- Hirose, Ken (with Nagaoka, Kazuaki; Umez, Mariko) Many-valued logic with truth values from finite lattices. (82d:03033)
- Howard, W. A. The formulae-as-types notion of construction. (82g:03094)
- Kron, Aleksandar Gentzen formulations of two positive relevance logics. (82g:03026)
- Mönting, Jürgen Schulte Cut elimination and word problems for varieties of lattices. (82j:08005)
- Nagaoka, Kazuaki See Hirose, Ken; et al., (82d:03033)
- Nishimura, Hirokazu A study of some tense logics by Gentzen's sequential method. (82g:03028)
- O'Donnell, Michael A practical programming theorem which is independent of Peano arithmetic. (82i:03066)
- Pottinger, Garrel A type assignment for the strongly normalizable λ -terms. (82j:03014)
- Tamura, Saburo On the word problem for lo-semigroups. (82g:06026)
- See also Gentzen, Gerhard, (82m:01080a) and (82m:01080b)
- Umez, Mariko See Hirose, Ken; et al., (82d:03033)

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- Cellucci, Carlo Proof theory and theory of meaning. (82f:03048)
- Oshiba, Takeshi A method for obtaining proof figures of valid formulas in the first order predicate calculus. (82m:03066)

secondary classifications:

- Gršin, V. N. Herbrand's theorem for logics without contractions. (Russian) (82d:03021)
- Predicate and set-theoretic calculi based on logic without the contraction rules. (Russian) (82g:03016)
- Kröger, F. Infinite proof rules for loops. (82d:68011)
- Tennant, Neil La barre de Scheffer dans la logique des sequents et des syllogismes. (82e:03013)

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- Diller, Justus Modified realization and the formulae-as-types notion. (82g:03093)
- Howard, W. A. The formulae-as-types notion of construction. (82g:03094)
- Ordinal analysis of bar recursion of type zero. (82d:03090)
- Ordinal analysis of terms of finite type. (82f:03049)
- Ordinal analysis of simple cases of bar recursion. (82g:03095)
- Takano, Michio On Gödel's primitive recursive functionals. (Japanese) (82j:03074)

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- Schütte, Kurt Beweistheoretische Abgrenzung von Teilsystemen der Analysis. (82g:03096)
- Šikić, Z. A note on sum-eliminator. (Serbo-Croatian summary) (82d:03091)
- Takeuti, Gaisi (with Yasugi, Mariko) An accessibility proof of ordinal diagrams. (82d:03092)
- Yasugi, Mariko A progression of consistency proofs. (82d:03093)
- See also Takeuti, Gaisi, (82d:03092)

secondary classifications:

- Felscher, Walter Eine weitreichende Wohlordnung der natürlichen Zahlen. (82d:03078)
- Howard, W. A. Ordinal analysis of bar recursion of type zero. (82d:03090)
- Ordinal analysis of terms of finite type. (82f:03049)
- Ordinal analysis of simple cases of bar recursion. (82g:03095)
- Jäger, Gerhard (with Schütte, Kurt) Eine syntaktische Abgrenzung der $(\Delta_1^1\text{-CA})$ -Analysis. (82f:03050)
- Schütte, Kurt See Jäger, Gerhard, (82f:03050)

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- Halfer, Izidor On proof length in the equivalential calculus. (82d:03094)
- Hatcher, William S. (with Hodgson, Bernard R.) Complexity bounds on proofs. (82j:03075)
- Hodgson, Bernard R. See Hatcher, William S., (82j:03075)
- Miyatake, Tooru On the length of proofs in formal systems. (82h:03065)
- Statman, Richard Speed-up by theories with infinite models. (82e:03075)

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- Goldfarb, Warren D. The undecidability of the second-order unification problem. (82e:03067)
- Justen, K. A note on regular resolution. (German summary) (82k:03012)
- Norwood, F. H. Long proofs. (82m:03002)

03F25 Relative consistency and interpretations

- Lindström, Per Some results on interpretability. (82i:03065)

secondary classifications:

- Azel, Peter (with Feferman, Solomon) Consistency of the unrestricted abstraction principle using an intensional equivalence operator. (82b:03037)
 Feferman, Solomon See Azel, Peter, (82b:03037)
 Ferro, Alfredo (with Micale, Biagio) On models of a first-order theory in which certain formulas define a model of another theory. (Italian. English summary) (82i:03043)
 Field, Harry H. ★Science without numbers. (82d:03008)
 Herre, Heinrich (with Seese, Detlef G.) Concerning the monadic theory of the topology of well-orderings and scattered spaces. (82i:03030)
 Hinnion, Roland Modèle constructible de la théorie des ensembles de Zermelo dans la théorie des types. (82c:03048)
 Hodges, Wilfrid Interpreting number theory in nilpotent groups. (82c:03047)
 Micale, Biagio See Ferro, Alfredo, (82i:03043)
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 Stein, Martin Interpretations of Heyting's arithmetic—an analysis by means of a language with set symbols. (82i:03067)
 Yasugi, Mariko A progression of consistency proofs. (82d:03093)

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- Artemov, S. N. Arithmetically complete modal theories. (Russian) 82a:03056
 Cegielski, Patrick La théorie élémentaire de la multiplication est conséquence d'un nombre fini d'axiomes de Σ_0 . (English summary) [The elementary theory of multiplication follows from a finite number of axioms of Σ_0] 82m:03067
 Dragalin, A. G. Algebraic approach to realizability type intuitionistic models. (Russian) 82a:03057
 Hasenjaeger, G. Prädikatenvariablen in der Zahlentheorie. 82g:03097
 Leivant, Daniel Implication complexity in intuitionistic arithmetic. 82b:03066
 McAloon, Kenneth Les rapports entre la méthode des indicatrices et la méthode de Gödel pour obtenir des résultats d'indépendance. 82g:03098a
 Progressions transfinies de théories axiomatiques, formes combinatoires du théorème d'incomplétude et fonctions récursives à croissance rapide. 82g:03098b
 Misereque, D. Solutions de deux problèmes posés par H. Simmons. 82k:03091
 O'Donnell, Michael A practical programming theorem which is independent of Peano arithmetic. 82i:03066
 Paris, J. B. Some independence results for Peano arithmetic. 82d:03095
 Ryan, W. J. Proof of the quadratic reciprocity law in primitive recursive arithmetic. 82b:03104
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- Benda, Miroslav On Harrington's partition relation. (82a:05065)
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 Bernardi, Claudio On the relation provable equivalence and on partitions in effectively inseparable sets. (82m:03057)
 Borgia, Marco A comparison of Gödel's incompleteness theorem and Tarski's theorem on the notion of truth. (Italian. English summary) (82g:03001)
 Bruss, Anna R. (with Meyer, Albert R.) On time-space classes and their relation to the theory of real addition. (82c:03061a)
 Cegielski, Patrick La théorie élémentaire de la multiplication. (English summary) (82i:03020)
 Kogan-Bernstein, L. M. Simplification of Gentzen's reductions for classical arithmetic. (Russian. English summary) (82c:03089)
 Kuzičev, A. A. (with Kuzičev, A. S.) The embedding of formal arithmetic in combinatorially complete systems. (Russian) (82k:03090)
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 Smoryński, Craig Some rapidly growing functions. (82c:03064)
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 Wilkie, A. J. Applications of complexity theory to Σ_0 -definability problems in arithmetic. (82b:03085)

Conference:

- CNRS, Model Theory and Arithmetic ★Model theory and arithmetic. (82m:03004)
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03F35 Second- and higher-order arithmetic and fragments [See also 03E30, 03E70.]

- Friedrich, W. (with Luckhardt, H.) Intuitionistic uniformity principles for propositions and some applications. 82m:03068
 Hayashi, Susumu Derived rules related to a constructive theory of metric spaces in intuitionistic higher order arithmetic without countable choice. 82j:03076
 Jäger, Gerhard (with Schütte, Kurt) Eine syntaktische Abgrenzung der $(\Delta_1^1\text{-CA})$ -Analysis. 82f:03050
 Luckhardt, H. See Friedrich, W., 82m:03068
 Pabion, Jean-François TT₁ est équivalent à l'arithmétique du second ordre. (English summary) 82f:03051

Papinhaus, Peter A version of the Σ_1 -reflection principle for CFA provable in PRA. 82b:03105

Schütte, Kurt See Jäger, Gerhard, 82f:03050

Stein, Martin Interpretations of Heyting's arithmetic—an analysis by means of a language with set symbols. 82i:03067

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- Friedman, Harvey A strong conservative extension of Peano arithmetic. (82d:03096)
 Gavrilenko, Ju. V. Recursive realizability from an intuitionistic viewpoint. (Russian) (82b:03067)
 Murawski, Roman Some remarks on the structure of expansions. (82c:03052)
 Nerode, Anil (with Shore, Richard A.) Second order logic and first order theories of reducibility orderings. (82g:03078)
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03F40 Gödel numberings in proof theory

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- Smoryński, Craig Calculating self-referential statements. (82g:03099)

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- Beeson, Michael Extensionality and choice in constructive mathematics. 82g:03100
 Dragalin, A. G. Functional algebraic models. (Russian) 82g:03101
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 López-Escobar, E. G. K. On the interpolation theorem for the logic of constant domains. 82i:03068
 Nepeivoda, N. N. Stable truth and computability. (Russian) 82f:03052
 Schwarz, G. F. The existence property with parameters for some extensions of the intuitionistic theory of types. (Russian) 82a:03058
 Wasilewska, Anita On the Gentzen-type formalizations. 82g:03102

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- Anisakov, O. M. On a constructivization of Bočvar's propositional logic. (Russian) (82b:03033)
 Friedrich, W. (with Luckhardt, H.) Intuitionistic uniformity principles for propositions and some applications. (82m:03068)
 Kreisel, G. Constructivist approaches to logic. (See 82f:03002)
 Lambek, J. (with Scott, P. J.) Intuitionist type theory and the free topos. (82b:03112)
 López-Escobar, E. G. K. Integrating intuitionistic and classical theories. (82k:03092)
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- Beeson, Michael Continuity in intuitionistic set theories. 82f:03053
 Brouwer, L. E. J. ★Brouwer's Cambridge lectures on intuitionism. 82i:03069
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- Burgess, John P. The completeness of intuitionistic propositional calculus for its intended interpretation. (82g:03015)
 Fischer-Servi, Gisèle Semantics for a class of intuitionistic modal calculi. (82f:03013)
 Fourman, Michael P. (with Scott, Dana S.) Sheaves and logic. (82d:03061)
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 Grayson, R. J. Heyting-valued models for intuitionistic set theory. (82g:03089)
 Concepts of general topology in constructive mathematics and in sheaves. (82g:03105)
 Hayashi, Susumu Derived rules related to a constructive theory of metric spaces in intuitionistic higher order arithmetic without countable choice. (82j:03076)
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 Nepeivoda, N. N. Stable truth and computability. (Russian) (82f:03052)
 Ruben, Peter ★Philosophie und Mathematik. (German) [Philosophy and mathematics] (82f:00014)

Scott, Dana S. Relating theories of the λ -calculus. (82d:03025)

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Demuth, Oswald (with Kminek, V.) Properties of indefinite constructive

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Hauck, Jürgen Berechenbarkeit in topologischen Räumen mit rekursiver Basis. (82j:03078)

03F65 Other constructive mathematics

Beeson, Michael Some problems in constructive mathematics. 82k:03093

Bridges, Douglas S. ★Constructive functional analysis. 82k:03094

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Grayson, R. J. Concepts of general topology in constructive mathematics and in sheaves. 82g:03105

Hauck, Jürgen Berechenbarkeit in topologischen Räumen mit rekursiver Basis. 82j:03078

Kuiper, B. A. Some topological properties of plane constructive curves. (Russian) 82n:03096

Schreiber, Peter Zur optimalen Lösung von Konstruktionsaufgaben. 82h:03108

Spring, David The Riemann integral in constructive mathematics. 82k:03097

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Bridges, Douglas S. A constructive proximality property of finite-dimensional linear subspaces. (82m:41024)

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Calder, Allan See Richman, Fred; et al., (82m:46013)

Demuth, Oswald On the constructive Perron integral. (Russian, English and Czech summaries) (82h:26013)

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Julian, William See Richman, Fred; et al., (82m:46013)

La Roche, Peter Effective Galois theory. (82j:03053)

Lorenzen, Paul Konstruktive Analysis und das geometrische Kontinuum. (82d:03010)

★Metamathematik. (German) [Metamathematics] (82c:03001)

Mines, Ray See Richman, Fred; et al., (82m:46013)

Pippinghaus, Peter Was ist konstruktive Mathematik? (82g:03104)

Richman, Fred (with Bridges, Douglas S.; Calder, Allan; Julian, William; Mines, Ray)

Compactly generated Banach spaces. (82m:46013)

See also Constructive mathematics. (82m:03003)

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Constructive Mathematics ★Constructive mathematics. (82m:03003)

Constructive mathematics ★Constructive mathematics. (82m:03003)

Las Cruces, N.M. ★Constructive mathematics. (82m:03003)

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Kateřinák, Josef The theory of finite structures of G -numbers. (Czech) 82k:03098

secondary classifications:

Babaev, A. A. Equality of morphisms and the coherence theorem for biclosed categories. (Russian, English summary) (82k:18006)

Enjalbert, P. Systèmes de déduction pour les arbres et les schémas de programmes. I. (English summary) (82m:68023a)

Systèmes de déduction pour les arbres et les schémas de programmes. II. (English summary) (82m:68023b)

Normann, Dag ★Recursion on the countable functionals. (82d:03075)

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03G05 Boolean algebras [See also 06Exx.]

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03H20 Other nonstandard models [See also 54J05.]

secondary classifications:

- Basarab, Șerban A. Extension of places and contraction properties for function fields over p -adically closed fields. (82j:03040)
- Heinrich, Stefan Ultraproducts in Banach space theory. (82k:46013)
- Tall, David The notion of infinite measuring number and its relevance in the intuition of infinity. (82c:03011)
- 03H99 None of the above, but in this section
- Crisma, Lucio (with Holzer, Silvano) Leibniz principle and unlimited formulas. Star concepts. (Italian. English summary) 82g:03113
- Holzer, Silvano See Crisma, Lucio, 82g:03113

secondary classifications:

Beck, Jon M. On the relationship between algebra and analysis. (82a:18005)

04-XX SET THEORY

04-01 Elementary exposition, textbooks

Binnmore, K. G. ★The foundations of analysis: a straightforward introduction. Book 1. 82d:04001

Cascante Dávila, Joaquín M.^{*} (with Plá Carrera, José) A precise proof of criterion CST.6 in Chapter IV of Nicolas Bourbaki's *Théorie des ensembles*. (Spanish) 82h:04001

Gladkii, A. V. ★Элементы теории множеств. (Russian) [Elements of set theory] 82f:04001

Plá Carrera, José See Cascante Dávila, Joaquín M.^{*}, 82h:04001

secondary classifications:

Grattan-Guinness, Ivor Are there paradoxes of the set of all sets? (82d:03085)

04-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

Kunen, Kenneth ★Set theory. (82f:03001)

04-03 Historical (must also be assigned at least one classification number from Section 01)

Rang, B. (with Thomas, Wolfgang) Zermelo's discovery of the "Russell paradox". (German and French summaries) 82k:04001

Thomas, Wolfgang See Rang, B., 82k:04001
(Zermelo, E.) See Rang, B.; et al., 82k:04001

secondary classifications:

(Baire, René) See Correspondence: Baire, René, (82i:01041)

(Bernstein, Felix) See Frewer, M., (82j:01065)

(Borel, Émile) See Correspondence: Baire, René, (82i:01041)

Cantor, Georg ★Gesammelte Abhandlungen mathematischen und philosophischen Inhalts. (German) [Collected essays of mathematical and philosophical content] (82i:01069)

See also Medvedev, F. A., (82h:01035a) and Markusevič, A. I., (82h:01035b)

(Denjoy, Arnaud) See Correspondence: Baire, René, (82i:01041)

Frewer, M. Felix Bernstein. (German) (82j:01065)

Kondō, Motokichi Les travaux de K. Kunugui sur la théorie des ensembles et leurs influences aux mathématiques du Japon. (82c:01093)

(Kunugui, Kinjirō) See Kondō, Motokichi, (82c:01093)

(Luzin, N. N.) See Correspondence: Baire, René, (82i:01041)

Markusevič, A. I. Remarks on the paper: "Cantor's theory of real numbers" [Istor.-Mat. Issled. No. 23 (1978), 56-70; MR 82h:01035a] by F. A. Medvedev. (Russian) (82h:01035b)

Medvedev, F. A. Cantor's theory of real numbers. (Russian) (82h:01035a)
The axiom of choice and mathematical analysis. (Russian) (82i:01030)

See also Markusevič, A. I., (82h:01035b)

Moore, Gregory H. Beyond first-order logic: the historical interplay between mathematical logic and axiomatic set theory. (82j:01057)

(de la Vallée Poussin, Charles) See Correspondence: Baire, René, (82i:01041)

(Volterra, Vito) See Correspondence: Baire, René, (82i:01041)

Bibliography:

Bernstein, Felix See Frewer, M., (82j:01065)

Kunugui, Kinjirō See Kondō, Motokichi, (82c:01093)

Biography:

Bernstein, Felix See Frewer, M., (82j:01065)

Correspondence:

Baire, René Lettres à René Baire. (82i:01041)

04-04 Explicit machine computation and programs (not the theory of computation or programming)

04-06 Proceedings, conferences, etc.

04A05 Relations, functions [See also 08A02.]

de Branges, Louis The Cantor construction. 82h:04001

Chaudhuri, Rita (with Mukherjee, A.) Idempotent Boolean matrices. 82g:04001

Fransy, Claude Sur quelques classes universelles de relations m -aires. 82h:04002

Gnedenkov, L. N. A variant of choice of axioms for the concept "relation". (Russian) 82e:04001

Höft, Hartmut Antisymmetry and lexicographic product relations. 82m:04001

Kosmák, Ladislav On equivalence relations. (Slovak and Russian summaries) 82i:04001

Mukherjee, A. See Chaudhuri, Rita, 82g:04001

Popescu, E. Sur les connexions Galois. 82a:04001

Rabinović, V. L. (with Rahmetžanov, S. R.) Compatibility and independence of properties of binary relations. (Russian) 82k:04002

Rahmetžanov, S. R. See Rabinović, V. L., 82k:04002

Šabanov-Kušnarenko, Ju. P. Formulas of the algebra of finite predicates. (Russian) 82e:04002

Toti Rigatelli, Laura A normal form theorem for impartial two-person games. (Italian) 82g:04002

Vasenko, V. P. Decomposition and separation of n -ary relations. (Russian) 82a:04002

secondary classifications:

Bodnárčuk, Ju. V. (with Kalužnin, L. A.) An algorithm for generation of permutations that preserve a given relation. (Russian) (82f:20002)

Comer, Stephen D. The representation of implicative BCK-algebras. (82a:06017)

Conant, Roger C. Set-theoretic structure modelling. (82f:68102)

Fraïssé, R. Le forcing faible: son utilisation pour caractériser les relations unaires générales pour la chaîne ou la consécuitivité des entiers naturels (résultat de R. Solovay, 1976). (82h:03098)

Grieder, Alfons On the logic of relations. (French and German summaries) (82f:03062)

Hodges, Wilfrid Encoding orders and trees in binary relations. (82k:03040)

Hodorovskii, L. A. See Nikolaev, V. I.; et al., (82d:68014)

Huber, Martin K. See Wirth, Karl, (82m:68079)

Huber, Oswald Die Erklärung der Non-Transitivität von Pseudo-Ordnungsrelationen. (82h:92059)

Kalužnin, L. A. See Bodnárčuk, Ju. V., (82f:20002)

Kay, David C. The Prenowitz join system for affine structures. (82d:52002)

Kim, Ki Hang (with Roush, Fred William) The algebraic structure of the semigroup of binary relations on a finite set. (82c:20113)

Kung, Joseph P. S. The Rédei function of a relation. (82c:05034)

Lau, Dietlinde Kongruenzen auf Postischen Algebren von Funktionen über einer Familie endlicher Mengen. (82h:08002)

Maddux, Roger Embedding modular lattices into relation algebras. (82d:06007)

Maurer, Stephen B. (with Rabinovitch, Issie; Trotter, William T., Jr.) A generalization of Turán's theorem to directed graphs. (82c:05061)

McBeth, Rod Exponential polynomials of linear height. (82g:03074)

Milner, E. C. (with Sauer, Norbert) On chains and antichains in well-founded partially ordered sets. (82j:04002)

Nikolaev, V. I. (with Petuhov, O. A.; Hodorovskii, L. A.) A family of relation-manipulation operations that extends the class of operations in relational algebra. (82d:68014)

Petuhov, O. A. See Nikolaev, V. I.; et al., (82d:68014)

Pouzet, Maurice Sur les chaînes d'un ensemble partiellement bien ordonné. (82a:06003)

Rabinovitch, Issie See Maurer, Stephen B.; et al., (82c:05061)

Rachunek, Jiří Reflexive and antisymmetric relations and their systems. (82j:08002)

Roush, Fred William See Kim, Ki Hang, (82c:20113)

Sanderson, John G. ★A relational theory of computing. (82m:68004)

Sauer, Norbert See Milner, E. C., (82j:04002)

Scott, Brian M. A characterization of well-orders. (82i:06001)

Šešelja, B. See Ušan, Janez; et al., (82j:06010)

Šik, František A characterization of polarities whose lattice of polars is Boolean. (82c:06013)

Silberger, D. M. Universal terms of complexity three. (82h:08006)

(Solovay, R.) See Fraïssé, R., (82h:03098)

Srivastava, Shashi Mohan Selection and representation theorems for σ -compact valued multifunctions. (82m:04002)

Taylor, Walter Some universal sets of terms. (82h:08005)

Trotter, William T., Jr. See Maurer, Stephen B.; et al., (82c:05061)

Trutovskii, V. B. On the question of the mathematical description of systems. (Russian) (82a:68179)

Ušan, Janez (with Šešelja, B.; Vojvodić, Gradimir D.) Generalized ordering and partitions. (82j:06010)

Vojvodić, Gradimir D. See Ušan, Janez; et al., (82j:06010)

White, D. E. (with Williamson, S. G.) Construction of minimal representative systems. (82d:05069)

Williamson, S. G. See White, D. E., (82d:05069)

Wirth, Karl (with Huber, Martin K.) Numbering of finite relational systems. (82m:68079)

Žarek-Etgens, Maria La définition et le prolongement de la solution de l'équation de translation. (82c:08004)

04A10 Transfinite numbers

Bagemihl, Frederick Infinite products of alephs. 82h:04003

Representation of ordinal numbers and derived sets in certain continuous sets. 82j:04001

Hickman, John L. A class of polynomial equations in a single ordinal variable. 82h:04002

Lenstra, H. W., Jr. Nim multiplication. 82i:04002

secondary classifications:

Felscher, Walter Eine weitreichende Wohlordnung der natürlichen Zahlen. (82d:03078)

Larson, Jean A. (with Laver, Richard; McNulty, George F.) Square-free and cube-free colorings of the ordinals. (82c:03069)

Laver, Richard See Larson, Jean A.; et al., (82c:03069)

Malyhin, V. I. On the power of first countable T_1 -bicomplexa. (82g:54009)

McNulty, George F. See Larson, Jean A.; et al., (82c:03069)

Milner, E. C. (with Sauer, Norbert) On chains and antichains in well-founded partially ordered sets. (82j:04002)

Pelletier, Donald H. The partition property for certain extendible measures on supercompact cardinals. (82c:03051)

Sauer, Norbert See Milner, E. C., (82j:04002)

04A15 Descriptive set theory; Borel classifications, Suslin schemes, etc. [See also 03E15, 28A05, 54H05.]

Brzuchowski, Jan (with Cichoń, Jacek; Węglorz, Bogdan) Some applications of strong Lusin sets. 82k:04003

Cichoń, Jacek See Brzuchowski, Jan; et al., 82k:04003

- Dellacherie, Claude** Un cours sur les ensembles analytiques. (See 82m:03063)
Grzegorek, Edward (with Ryll-Nardzewski, Czesław) On universal null sets. 82c:04001
Hoffmann-Jørgensen, J. See **Topsoe, F.** (See 82m:03063)
Kaniewski, J. (with Rogers, C. Ambrose) Double uniformization. 82d:04002
Kanovei, V. G. On countable sequences of sets obtained by the sieve operation. (Russian) 82k:04004
Müller, Arnold W. On generating the category algebra and the Baire order problem. (Russian summary) 82c:04005
Miller, Harry I. A general partition theorem for sets of reals. (Serbo-Croatian summary) 82h:04004
Rogers, C. Ambrose See **Kaniewski, J.**, 82d:04002
Ryll-Nardzewski, Czesław See **Grzegorek, Edward**, 82c:04001
Srivastava, Shashi Mohan Selection and representation theorems for σ -compact valued multifunctions. 82m:04002
Stone, A. H. Analytic sets in nonseparable metric spaces. (See 82m:03063)
Topsoe, F. (with Hoffmann-Jørgensen, J.) Analytic spaces and their application. (See 82m:03063)
Węglorz, Bogdan See **Brzuchowski, Jan**; et al., 82k:04003

secondary classifications:

- Blackwell, David** Borel sets via games. (82c:28001)
Brzuchowski, Jan (with Cichoń, Jacek; Grzegorek, Edward; Ryll-Nardzewski, Czesław) On the existence of nonmeasurable unions. (Russian summary) (82h:28002)
Burgess, John P. Sélections mesurables pour relations d'équivalence analytiques à classes G_δ . (English summary) (82c:28020)
 Careful choices—a last word on Borel selectors. (82h:03049)
Cichoń, Jacek See **Brzuchowski, Jan**; et al., (82h:28002)
Dellacherie, Claude Capacities and analytic sets. (82j:54085)
 Mesurabilité des débuts et théorème de section: le lot à la portée de toutes les bourses. (82j:60057)
Fremlin, D. H. Borel sets in nonseparable Banach spaces. (82g:46051)
Friedman, Harvey (with Talagrand, Michel) Un ensemble singulier. (English summary) (82d:28002)
Grzegorek, Edward (with Ryll-Nardzewski, Czesław) A remark on absolutely measurable sets. (Russian summary) (82f:54065)
 See also **Brzuchowski, Jan**; et al., (82h:28002)
Hansell, R. W. Borel-additive families and Borel maps in metric spaces. (82i:54069)
Jayne, John E. (with Rogers, C. Ambrose) Corrigenda et addenda: "Borel isomorphisms at the first level. I, II" [Mathematika 26 (1979), no. 1, 125–156; *ibid.* 26 (1979), no. 2, 157–159 (1980); MR 81h:54048ab]. (82c:54043)
Kaufman, Robert P. Lipschitz spaces and Suslin sets. (82h:47005)
Kechris, Alexander S. See **Martin, Donald A.**, (See 82m:03063)
Kreinin, Ja. L. Sets that are diagonally distinct from S -sets. (Russian) (82f:54066)
Louveau, Alain ★Ensembles analytiques et boréliens dans les espaces produits. (French) [Analytic and Borel sets in product spaces] (82j:03062)
Martin, Donald A. (with Kechris, Alexander S.) Infinite games and effective descriptive set theory. (See 82m:03063)
Moschovakis, Yiannis N. ★Descriptive set theory. (82c:03002)
Raisonnier, Jean Composantes connexes et quasi-composantes connexes itérées dans les espaces polonais. (English summary) (82j:54025)
Ramakrishnan, S. (with Rao, B. V.) B -spaces are standard Borel. (82k:28023)
Rao, B. V. See **Ramakrishnan, S.**, (82k:28023)
Rogers, C. Ambrose See **Jayne, John E.**, (82c:54043)
Ryll-Nardzewski, Czesław See **Brzuchowski, Jan**; et al., (82h:28002) and **Grzegorek, Edward**, (82f:54065)
Strauch, Otto The decomposition of uncountable closed sets of real numbers. (Slovak and Russian summaries) (82c:26001)
Talagrand, Michel See **Friedman, Harvey**, (82d:28002)
 Analytic sets ★Analytic sets. (82m:03063)
 Astérisque See **Louveau, Alain**, (82j:03062)
 Conference:
 Analytic Sets ★Analytic sets. (82m:03063)
 London ★Analytic sets. (82m:03063)

04A20 Combinatorial [See also 05A05.]; filters

- Argyros, S.** A combinatorial theorem for families of functions. 82h:04003
Assouad, Patrice Sur les classes de Vapnik-Červonenkis. (English summary) 82i:04003
Blass, Andreas Some initial segments of the Rudin-Keisler ordering. 82c:04002
Frankl, Péter Families of finite sets with prescribed cardinalities for pairwise intersections. 82f:04002
Grzegorek, Edward Solution of a problem of Banach on σ -fields without continuous measures. (Russian summary) 82h:04005
 On saturated sets of Boolean rings and Ulam's problem on sets of measures. 82k:04006
Kipiani, A. E. The denumerable homogeneity of sets in abstract spaces. (Russian, Georgian and English summaries) 82c:04003
Kurepa, Đuro On $[m, n]$ -ramifications or $[m, n]$ -pseudotrees of sets. 82f:04003
Mekler, Alan H. (with Pelletier, Donald H.; Taylor, Alan D.) A note on a lemma of Shelah concerning stationary sets. 82k:04007
Milliken, Keith R. A partition theorem for the infinite subtrees of a tree. 82g:04003
Milner, E. C. (with Sauer, Norbert) Remarks on the cofinality of a partially ordered set, and a generalization of König's lemma. 82g:04004
 (with Sauer, Norbert) On chains and antichains in well-founded partially ordered sets. 82j:04002
Pelletier, Donald H. See **Mekler, Alan H.**; et al., 82k:04007
Rado, Richard Selective families of sets. 82g:04005
Sauer, Norbert See **Milner, E. C.**, 82g:04004 and 82j:04002
Taylor, Alan D. See **Mekler, Alan H.**; et al., 82k:04007

- Todoćević, Stevo B.** Rigid Aronszajn trees. 82k:04008
Tsarpalis, A. A combinatorial theorem. 82j:04003

secondary classifications:

- Aharoni, Ron** Representing matrices. (82c:05038)
Balcar, Bohuslav (with Simon, Petr; Vojtáš, Peter) Refinement and properties and extending of filters. (Russian summary) (82h:06019)
Benda, Miroslav On Harrington's partition relation. (82c:05065)
Bernardi, Claudio The dual space of a product of Boolean algebras and the Stone compactifications. (Italian, English summary) (82i:06018)
Erdős, Paul On the combinatorial problems which I would most like to see solved. (82k:05001)
Evans, Elliott Slim trees. (82i:06004)
Frankl, Péter (with Rosenberg, Ivo) A finite set intersection theorem. (82j:05002)
Gavalec, Martin (with Vojtáš, Peter) Remarks to a modification of Ramsey-type theorems. (82c:05053)
Graham, Ronald L. (with Rothschild, Bruce L.; Spencer, Joel H.) ★Ramsey theory. (82h:05001)
Jovanović, Aleksandar Ultraproducts of well orders. (82i:03038)
Kubota, Nobuo Note on free subsets. (82c:03050)
Lambert, William M. On recursion with very large objects. (Spanish, English summary) (82k:03080)
Máté, Attila A partition relation for Souslin trees. (82k:03078)
van Mill, Jan When $U(\kappa)$ can be mapped onto $U(\omega)$. (82a:54010)
Pelletier, Donald H. The partition property for certain extendible measures on supercompact cardinals. (82c:03051)
Pranesachar, C. R. Some formulae for the number of SDRs and symbolic representations. (82k:05006)
Rosenberg, Ivo See **Frankl, Péter**, (82j:05002)
Rothschild, Bruce L. See **Graham, Ronald L.**; et al., (82h:05001)
Schmidt, Diana The relation between the height of a well-founded partial ordering and the order types of its chains and antichains. (82i:06002)
Simon, Petr A compact Fréchet space whose square is not Fréchet. (82a:54038)
 See also **Balcar, Bohuslav**; et al., (82h:06019)
Spencer, Joel H. See **Graham, Ronald L.**; et al., (82h:05001)
Taylor, Alan D. On saturated sets of ideals and Ulam's problem. (82a:03045)
Teĭniarskiĭ, Rastislav On point-open games and their generalizations. (82b:54015)
Vojtáš, Peter See **Balcar, Bohuslav**; et al., (82h:06019) and **Gavalec, Martin**, (82i:05053)
Weinberg, Elliot C. Automorphism groups of minimal η_α -sets. (82c:06032)

04A25 Axiom of choice and equivalent propositions (Zorn's lemma, etc.) [See also 03E25.]

- Krom, Melven** Equivalents of a weak axiom of choice. 82f:04004
Moroianu, Mihnea The Zorn-Bourbaki theorems and their applications. (Romanian, English summary) 82i:04004
Rubčinskii, A. A. See **Vinogradskaja, T. M.**, 82f:04005
Vinogradskaja, T. M. (with Rubčinskii, A. A.) Logical forms of choice functions. (Russian) 82f:04005

secondary classifications:

- Andréka, Hajnal** (with Némethi, István) Does $SP\ K \supseteq PS\ K$ imply axiom of choice? (82a:08002)
Medvedev, F. A. The axiom of choice and mathematical analysis. (Russian) (82i:01030)
Némethi, István See **Andréka, Hajnal**, (82a:08002)

04A30 Continuum hypothesis, generalized continuum hypothesis [See also 03E50, 54A25.]

- Erdős, Paul** Some remarks on subgroups of real numbers. 82c:04004

secondary classifications:

- Harazivili, A. B.** On the uniqueness property of a measure on its domain of definition. (Russian, Georgian and English summaries) (82h:28005)
Jensen, Christian U. Propriétés homologiques et logiques des anneaux de fonctions entières. (English summary) (82k:30057)
Kannan, V. (with Rajagopalan, M.) Constructions and applications of rigid spaces. III. (82c:54045c)
Rajagopalan, M. See **Kannan, V.**, (82c:54045c)
Shelah, Saharon A note on cardinal exponentiation. (82c:03070)
Talagrand, Michel Non existence de relèvement pour certaines mesures finement additives et retractés de βN . (82i:28010)

04A99 Miscellaneous topics

- Deciu, Elena** On the cardinal number and on the structure of the set of all subrings of the rational numbers field. (Romanian summary) 82a:04003
Joshi, Faraz G. Set theory and the continuum hypothesis. 82a:04004
Kirmayer, G. A refinement of Cantor's theorem. 82j:04004

secondary classifications:

- Breban, M.** (with Ferro, Alfredo; Omodeo, Eugenio Giovanni; Schwartz, Jacob T.) Decision procedures for elementary sublanguages of set theory. II. Formulas involving restricted quantifiers, together with ordinal, integer, map, and domain notions. (82i:03018b)
Ferro, Alfredo (with Omodeo, Eugenio Giovanni; Schwartz, Jacob T.) Decision procedures for elementary sublanguages of set theory. I. Multilevel syllogistic and

some extensions. (82i:03018a)

See also Brehan, M.; et al., (82i:03018b)

- Jubien, Michael Formal semantics and the existence of sets. (82j:03003)
 Onoedo, Eugenio Giovanni See Ferro, Alfredo; et al., (82i:03018a) and Brehan, M.; et al., (82i:03018b)
 Overdijk, D. A. (with Simons, F. H.; Thiemann, J. G. F.) A comment on unions of rings. (82e:28001)
 Schneider, Hans-Jürgen Set-theoretic concepts in programming languages and their implementation. (82h:68007)
 Schwartz, Jacob T. See Ferro, Alfredo; et al., (82i:03018a) and Brehan, M.; et al., (82i:03018b)
 Schwarz, Gideon (with Tversky, Amos) On the reciprocity of proximity relations. (82f:92050)
 Simons, F. H. See Overdijk, D. A.; et al., (82e:28001)
 Thiemann, J. G. F. See Overdijk, D. A.; et al., (82e:28001)
 Tversky, Amos See Schwarz, Gideon, (82f:92050)
 Wolf, Robert S. A highly efficient "transfinite recursive definitions" axiom for set theory. (82d:03082)
 Yuan, Xiang Wan See Zhu, Wu Jia; et al., (82b:03025)
 Zheng, Yu Xin See Zhu, Wu Jia; et al., (82b:03025)
 Zhu, Wu Jia (with Yuan, Xiang Wan; Zheng, Yu Xin) Concerning sets and point-set spaces. (Chinese. English summary) (82b:03025)

05-XX COMBINATORICS {For finite fields, see 12Cxx.}

05-01 Elementary exposition, textbooks

- Bryant, Victor (with Perfect, Hazel) ★Independence theory in combinatorics. 82d:05001
 Haggard, Gary ★Excursions in graph theory. 82m:05001
 Leffner, Günter ★Elemente der Topologie und Graphentheorie. (German) [Elements of topology and graph theory] 82h:05001
 Ollerenshaw, Kathleen The Hungarian magic cube. 82c:05001
 Ore, Oystein ★Теория графов. (Russian) [Theory of graphs] 82c:05002
 Perfect, Hazel See Bryant, Victor, 82d:05001
 Stein, S. K. Existence out of chaos. (See 82c:00006)
 Tucker, Alan ★Applied combinatorics. 82i:05001
 (Vrublevskaja, I. N.) See Ore, Oystein, 82c:05002

secondary classifications:

- Newman, B. B. The flippin' coins problem. (82i:05007)
 Salwach, Chester J. Planes, biplanes, and their codes. (82c:05018)
 (Schwartz, Benjamin L.) See Mathematical solitaires and games, (82i:00005)
 Sved, Marta Tales from the "county club". (82c:05015)
 Games ★Mathematical solitaires & games. (82i:00005)
 Mathematical solitaires and games ★Mathematical solitaires & games. (82i:00005)

05-02 Advanced exposition (research surveys, monographs, etc.)

- Cameron, Peter J. (with van Lint, Jacobus Hendricus) ★Graphs, codes and designs. 82d:05002
 (with van Lint, Jacobus Hendricus) ★Теория графов, теория кодирования и блок-схемы. (Russian) [Graph theory, coding theory and block designs] 82d:05003
 Erdős, Paul On the combinatorial problems which I would most like to see solved. 82i:05001
 Geramita, Anthony V. (with Seberry, Jennifer) ★Orthogonal designs. 82a:05001
 Graham, Ronald L. (with Rothschild, Bruce L.; Spencer, Joel H.) ★Ramsey theory. 82b:05001
 van Lint, Jacobus Hendricus See Cameron, Peter J., 82d:05002 and Cameron, Peter J., 82d:05003
 Rothschild, Bruce L. See Graham, Ronald L.; et al., 82b:05001
 Seberry, Jennifer See Geramita, Anthony V., 82a:05001
 Spencer, Joel H. See Graham, Ronald L.; et al., 82b:05001
 (Stečkin, B. S.) See Cameron, Peter J.; et al., 82d:05003
 Welsh, D. J. A. Colourings, flows and projective geometry. 82h:05002

secondary classifications:

- Bermond, J.-C. (with Thomassen, Carsten) Cycles in digraphs—a survey. (82k:05053)
 Erdős, Paul (with Graham, Ronald L.) ★Old and new problems and results in combinatorial number theory. (82j:10001)
 Gavrilov, G. P. (with Liskovec, V. A.; Permjakov, P. P.; Selivanov, B. I.) Some tendencies in the theory of enumeration (supplement-survey). (Russian) (See 82h:05018)
 Graham, Ronald L. ★Rudiments of Ramsey theory. (82j:05018)
 See also Erdős, Paul, (82j:10001)
 Kalbfleisch, J. G. See Stanton, R. G., (82g:05066)
 Liskovec, V. A. See Gavrilov, G. P.; et al., (See 82h:05018)
 Permjakov, P. P. See Gavrilov, G. P.; et al., (See 82h:05018)
 Selivanov, B. I. See Gavrilov, G. P.; et al., (See 82h:05018)
 Stanton, R. G. (with Kalbfleisch, J. G.) Introduction to Ramsey theory. (82g:05066)
 Thomassen, Carsten See Bermond, J.-C., (82k:05053)

05-03 Historical (must also be assigned at least one classification number from Section 01)

- (Burnside, W.) See Wright, E. M., 82d:05004
 Wright, E. M. Burnside's lemma: a historical note. 82d:05004

secondary classifications:

- (Baimakova, I. G.) See History and methodology of the natural sciences, (82c:01004)
 Homenko, M. P. (with Vivrot, T. M.) Mutual interrelationship of the ideas of matrix theory and graph theory in their historical development. II. (Russian) (82k:01025)
 Ikeda, Sadao Professor Junjiro Ogawa. (82g:01054)
 Kahn, David On the origin of polyalphabetic substitution. (82m:01021)
 Knobloch, Eberhard Musurgia universalis: unknown combinatorial studies in the age of Baroque absolutism. (82h:01016)
 Nash-Williams, C. St. J. A. A note on some of Professor Tutte's mathematical work. (82c:01079)
 (Ogawa, Junjiro) See Ikeda, Sadao, (82g:01054)
 (Rybnikov, K. A.) See History and methodology of the natural sciences, (82c:01004)
 (Tjulina, I. A.) See History and methodology of the natural sciences, (82c:01004)
 (Turán, Pál) See Bibliography: Turán, Pál, (82f:01090c)
 (Tutte, William T.) See Nash-Williams, C. St. J. A., (82c:01079) and Bibliography: Tutte, William T., (82c:01108)
 Vivrot, T. M. See Homenko, M. P., (82k:01025)

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- Ogawa, Junjiro See Ikeda, Sadao, (82g:01054)
 Turán, Pál List of works of Paul Turán. (82f:01090c)
 Tutte, William T. Papers and books by W. T. Tutte. (82c:01108)

Biography:

- Ogawa, Junjiro See Ikeda, Sadao, (82g:01054)
 History and methodology of the natural sciences ★История и методология естественных наук. Вып. XXV. (Russian) [History and methodology of the natural sciences. No. XXV] (82c:01004)
 Natural sciences ★История и методология естественных наук. Вып. XXV. (Russian) [History and methodology of the natural sciences. No. XXV] (82c:01004)

05-04 Explicit machine computation and programs (not the theory of computation or programming)

- Foulds, L. R. See Johnstone, D. G., 82c:05003
 Johnstone, D. G. (with Foulds, L. R.) Chess piece placement puzzles. 82c:05003
 Lam, C. W. H. (with Swiercz, S.; Thiel, L.; Regener, E.) A computer search for (α, ω) -graphs. 82b:05002
 Regener, E. See Lam, C. W. H.; et al., 82b:05002
 Swiercz, S. See Lam, C. W. H.; et al., 82b:05002
 Thiel, L. See Lam, C. W. H.; et al., 82b:05002

secondary classifications:

- Bate, John Aubrey See Stanton, R. G., (82h:05015)
 Brigham, Robert C. See Dutton, Ronald D., (82b:68025)
 Colbourn, Charles J. See Colbourn, Marlene J., (82c:68038)
 Colbourn, Marlene J. (with Colbourn, Charles J.) The complexity of combinatorial isomorphism problems. (82c:68038)
 Dinitz, J. H. (with Stinson, D. R.) A fast algorithm for finding strong starters. (82c:05033)
 Dutton, Ronald D. (with Brigham, Robert C.) A new graph colouring algorithm. (82b:68025)
 Geldmacher, R. C. See Liu, P. C., (82c:05083)
 Liu, P. C. (with Geldmacher, R. C.) An $O(\max(m, n))$ algorithm for finding a subgraph homeomorphic to K_4 . (82c:05083)
 Stanton, R. G. (with Bate, John Aubrey) A computer search for B -coverings. (82h:05015)
 Stinson, D. R. See Dinitz, J. H., (82c:05033)
 Walsh, T. R. S. Generation of nonisomorphic maps on a computer. (Russian) (82j:05070)
 Zuev, Ju. A. A covering problem: local approach and a branch and bound type method. (Russian) (82d:05052)

05-06 Proceedings, conferences, etc.

- (Alavi, Yousef) See Theory and applications of graphs, 82i:05002
 (Cameron, Peter J.) See Finite geometries and designs, 82g:05003
 (Chartrand, Gary) See Theory and applications of graphs, 82i:05002
 (Goldsmith, Donald L.) See Theory and applications of graphs, 82i:05002
 (Hadlock, F. O.) See Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 82b:05004
 (Hirschfeld, J. W. P.) See Finite geometries and designs, 82g:05003
 (Hoffman, F.) See Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 82b:05004
 (Hughes, D. R.) See Finite geometries and designs, 82g:05003
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 (Lick, Don R.) See Theory and applications of graphs, 82i:05002
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 (McAvaney, Kevin L.) See Combinatorial mathematics, 82k:05003
 (Mullin, R. C.) See Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 82b:05004
 (Revjakin, A. M.) See Problems of combinatorial analysis, 82d:05005
 (Robinson, Robert W.) See Combinatorial mathematics, 82c:05004
 (Rybnikov, K. A.) See Problems of combinatorial analysis, 82d:05005
 (Sós, Vera T.) See Algebraic methods in graph theory, 82k:05002
 (Southern, George W.) See Combinatorial mathematics, 82c:05004
 (Stanton, R. G.) See Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 82b:05004
 (Stečkin, B. S.) See Problems of combinatorial analysis, 82d:05005
 (Temperley, H. N. V.) See Combinatorics, 82i:05001
 (Van Rees, G. H. J.) See Proceedings: Southeastern Conference on Combinatorics, Graph Theory and Computing, 82b:05004

- (Wallis, Walter D.) See *Combinatorial mathematics*. 82c:05004
- Algebraic methods in graph theory** ★Algebraic methods in graph theory. Vol. I, II. 82c:05002
- Applied combinatorial theory and algorithms** ★Applied combinatorial theory and algorithms. 82g:05001
- Boca Raton, Fla.** ★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. 82b:05004a
★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. II. 82b:05004b
- Chelwood Gate** ★Finite geometries and designs. 82g:05003
- Colloquia Mathematica Societatis János Bolyai** ★Algebraic methods in graph theory. Vol. I, II. 82k:05002
- Combinatorial analysis** ★Проблемы комбинаторного анализа. (Russian) [Problems of combinatorial analysis] 82d:05005
- Combinatorial mathematics** ★Combinatorial mathematics. VII. 82c:05004
★Combinatorial mathematics. VIII. 82k:05003
- Combinatorial structures of configurations** ★Combinatorial structures of configurations. (Japanese) 82g:05002
- Combinatorial theory** ★Applied combinatorial theory and algorithms. 82g:05001
- Combinatorics** ★Graphs and combinatorics. III. 82b:05003
★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. 82b:05004a
★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. II. 82b:05004b
★Theory of experimental layouts and its applications. 82d:05006
★Combinatorics. 82i:05001
- Computing** ★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. 82b:05004a
★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. II. 82b:05004b
- Conference:**
Algebraic Methods in Graph Theory ★Algebraic methods in graph theory. Vol. I, II. 82k:05002
Australian Combinatorial Mathematics ★Combinatorial mathematics. VII. 82c:05004
★Combinatorial mathematics. VIII. 82k:05003
British Combinatorial ★Combinatorics. 82i:05001
Isle of Thorns, Finite Geometries and Designs ★Finite geometries and designs. 82g:05003
Southeastern, Combinatorics, Graph Theory and Computing ★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. 82b:05004a
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Theory and Applications of Graphs ★The theory and applications of graphs. 82i:05002
- Finite geometries and designs** ★Finite geometries and designs. 82g:05003
- Geelong** ★Combinatorial mathematics. VIII. 82k:05003
- Graph theory** ★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. 82b:05004a
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- Graphs and combinatorics** ★Graphs and combinatorics. III. 82b:05003
- Kalamazoo, Mich.** ★The theory and applications of graphs. 82i:05002
- Newcastle** ★Combinatorial mathematics. VII. 82c:05004
- Problems of combinatorial analysis** ★Проблемы комбинаторного анализа. (Russian) [Problems of combinatorial analysis] 82d:05005
- Proceedings:**
Southeastern Conference on Combinatorics, Graph Theory and Computing
★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. I. 82b:05004a
★Proceedings of the Eleventh Southeastern Conference on Combinatorics, Graph Theory, and Computing. Vol. II. 82b:05004b
- Swansea** ★Combinatorics. 82i:05001
- Symposium:**
Applied Combinatorial Theory and Algorithms ★Applied combinatorial theory and algorithms. 82g:05001
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Graphs and Combinatorics ★Graphs and combinatorics. III. 82b:05003
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- Szeged** ★Algebraic methods in graph theory. Vol. I, II. 82k:05002
- Theory and applications of graphs** ★The theory and applications of graphs. 82i:05002
- Theory of experimental layouts and its applications** ★Theory of experimental layouts and its applications. 82d:05006
- secondary classifications:
- (Beckenbach, Edwin F.) See *General inequalities*. (82b:00004)
- (Christofides, Nicos) See *Combinatorial optimization*. (82a:90099)
- (Glazunov, N. M.) See *Computations in algebra, number theory and combinatorics*. (82d:20006)
- (Kalužnin, L. A.) See *Computations in algebra, number theory and combinatorics*. (82d:20006)
- (Mingozzi, Aristide) See *Combinatorial optimization*. (82a:90099)
- (Sandi, Claudio) See *Combinatorial optimization*. (82a:90099)
- (Toth, Paolo) See *Combinatorial optimization*. (82a:90099)
- Algebra** ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] (82d:20006)
- Combinatorial optimization** ★Combinatorial optimization. (82a:90099)
- Combinatorics** ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] (82d:20006)
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- Conference:**
General Inequalities ★General inequalities. 2. (82b:00004)
General inequalities ★General inequalities. 2. (82b:00004)
- Number theory** ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] (82d:20006)
- Oberwolfach** ★General inequalities. 2. (82b:00004)
- Summer School:**
Combinatorial Optimization ★Combinatorial optimization. (82a:90099)
- Urbino** ★Combinatorial optimization. (82a:90099)
- ## 05Axx Classical combinatorial problems
- ### 05A05 Combinatorial choice problems (subsets, representatives, permutations)
- Abbott, H. L.** (with Liu, Andy C. F.) On property B of families of sets. 82d:05007
On a conjecture of Erdős and Silverman in combinatorial geometry. 82d:05008
- Abraham, Jaromir** (with Kotzig, Anton) Generalized additive permutations of cardinality six. 82k:05004
(with Kotzig, Anton) Bases of additive permutations with a given number of odd elements. 82c:05005
- Bry, François** Note on a theorem of J. Folkman on transversals of infinite families with finitely many infinite members. 82c:05001
- Celmins, Uldis A.** (with Wang, Edward Tzu Hsia) Transitive sets of permutations. 82h:05005
- Chung, F. R. K.** On unimodal subsequences. 82a:05002
- Clements, G. F.** (with Gronau, Hans-Dietrich O. F.) On maximal antichains containing no set and its complement. 82c:05002
- Epp, Robert J.** (with Ferguson, Thomas S.) A note on take-away games. 82b:05006
- Erdős, Paul** Proof of a conjecture of Offord. 82d:05009
- Ferguson, Thomas S.** See Epp, Robert J., 82b:05006
- Fishburn, Peter C.** Maximum semiorders in interval orders. 82j:05001
- Frankl, Peter** A general intersection theorem for finite sets. 82b:05007
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- Griggs, Jerrold R.** The Littlewood-Offord problem: tightest packing and an M-part Sperner theorem. 82c:05003
(with Sturtevant, Dean; Saks, Michael E.) On chains and Sperner k -families in ranked posets. II. 82c:05004
- Gronau, Hans-Dietrich O. F.** On maximal antichains consisting of sets and their complements. 82c:05002
See also Clements, G. F., 82c:05002
- Györi, Ervin** (with Turán, György) Stack of pancakes. 82m:05002
- Kleitman, Daniel J.** See Shearer, James B., 82j:05004
- Kotzig, Anton** Existence theorems for bases of additive permutations. 82k:05005
See also Abraham, Jaromir, 82c:05005 and 82k:05004
- Liu, Andy C. F.** See Abbott, H. L., 82d:05007
- Mullen, Gary L.** Local permutation polynomials in three variables over Z_p . 82c:05006
- Pranesachar, C. R.** Some formulae for the number of SDRs and symbolic representations. 82k:05006
- Prather, Ronald E.** Generating the k -subsets of an n -set. 82c:05005
- Quattrocchi, Gaetano** A problem of J. Dénes on certain finite sequences. (Italian. English summary) 82m:05003a
Relations between major sequences and complete cycles of degree n . (Italian. English summary) 82m:05003b
- Rosenberg, Ivo** See Frankl, Peter, 82j:05002
- Saks, Michael E.** See Griggs, Jerrold R.; et al., 82c:05004
- Schaefer, Paul** Sum-preserving rearrangements of infinite series. 82j:05003
- Shearer, James B.** (with Kleitman, Daniel J.) Probabilities of independent choices being ordered. 82j:05004
- Shelton, Robert O.** Aperiodic words on three symbols. 82m:05004a
Aperiodic words on three symbols. II. 82m:05004b
(with Soni, Raj P.) Aperiodic words on three symbols. III. 82m:05004c
- Soni, Raj P.** See Shelton, Robert O., 82m:05004c
- Spencer, Joel H.** Sums. 82k:05007
- Sturtevant, Dean** See Griggs, Jerrold R.; et al., 82c:05004
- Turán, György** See Györi, Ervin, 82m:05002
- Wang, Edward Tzu Hsia** See Celmins, Uldis A., 82h:05005
- secondary classifications:
- Ayoub, F.** Encryption with keyed random permutations. (82h:94023)
- Beck, József** Balancing families of integer sequences. (82m:10080)
- Berenguer, X.** (with Diaz, Josep) The weighted Sperner's set problem. (82j:68055)
- Bryant, Victor** (with Perfect, Hazel) ★Independence theory in combinatorics. (82d:05001)
- Cameron, Peter J.** Orbits of permutation groups on unordered sets. II. (82k:20005)
- Carlitz, L.** Up-down permutations of higher order. (82m:05007)
The number of permutations with a given number of sequences. (82h:05003)
- Chung, F. R. K.** (with Graham, Ronald L.; Hoggatt, Verner E., Jr.; Kleiman, M.) The number of Baxter permutations. (82b:05011)
See also Steele, J. Michael, (82i:60029)
- Diaz, Josep** See Berenguer, X., (82j:68055)
- Dumont, Dominique** (with Viennot, Gérard) A combinatorial interpretation of the Seidel generation of Genocchi numbers. (82j:10024)

- Dvornicich, Roberto On a problem of cyclic permutations of integers. (82g:05015)
- Eckhoff, Jürgen Über kombinatorisch-geometrische Eigenschaften von Komplexen und Familien konvexer Mengen. (82b:51021)
- Frankl, Péter Families of finite sets with prescribed cardinalities for pairwise intersections. (82f:04002)
- Gabovitch, E. Ja. (with Melamed, I. I.) An approach to the analysis of discrete problems regarding lengths of permutations. (82m:90151)
- Gansner, Emden R. Matrix correspondences of plane partitions. (82f:05009)
- Godinho, Pedro Henrique See Madsen Barbosa, Ruy, (82e:05017)
- Gorunović, S. A. See Kovalev, M. M., (82f:05026)
- Graham, Ronald L. See Chung, F. R. K.; et al., (82b:05011)
- Grassl, R. M. See Hillman, A. P., (82f:05006)
- Guibas, Leo J. (with Odlyzko, Andrew M.) String overlaps, pattern matching, and nontransitive games. (82g:05007)
- Hillman, A. P. (with Grassl, R. M.) Skew-tableaux and the insertion algorithms. (82f:05006)
- Hoggatt, Verner E., Jr. See Chung, F. R. K.; et al., (82b:05011)
- Jackson, D. M. See Spears, William T.; et al., (82e:05018)
- Jeffcott, Barbara See Spears, William T.; et al., (82e:05018)
- Katona, Gyula O. H. Search using sets with small intersection. (French summary) (82b:94017)
- Keane, Michael S. (with Rauzy, Gérard) Stricte ergodicité des échanges d'intervalles. (82d:28014)
- Kierstead, Henry A. An effective version of Dilworth's theorem. (82k:03069)
- Kleiman, M. See Chung, F. R. K.; et al., (82b:05011)
- Klein, Douglas J. Extension of the Dirac identity. (82c:81055)
- Kleinjohann, Norbert Remark on the Helly number for strongly convex sets on Riemannian manifolds. (82e:52019)
- Klin, M. H. Examination on the MIR-1 computer of exclusive cases in the problem of maximality of induced symmetric groups. (Russian) (82g:20009)
- Kodandapani, K. L. See Pradhan, D. K., (82d:94079)
- Kovalev, M. M. (with Gorunović, S. A.) Permutation polymatroids. (Russian. English summary) (82f:05026)
- Kreweras, G. The number of more or less "regular" permutations. (82c:05011)
- Kühlbrandt, Harold On sharply 2-transitive permutation sets. (82e:51009)
- Levin, G. M. On the optimization of functions recursively given on weakly normalized sets of permutations. (Russian. English summary) (82a:90090)
- Lindström, Bernt On matroids and Sperner's lemma. (82c:05028)
- Lipski, Witold, Jr. More on permutation generation methods. (82m:68077)
- Lynch, James F. The visually distinct configurations of k sets. (82b:05015)
- Madsen Barbosa, Ruy (with Godinho, Pedro Henrique) A note on the generating function and distribution of permutations by the number of cycles. (Portuguese. English summary) (82e:05017)
- Melamed, I. I. See Gabovitch, E. Ja., (82m:90151)
- Mohanty, S. P. (with Rao, Daljit) Different shortest permutation strings $T(n)$ for $n=3, 4, 5, 6$ and 7 . (82g:05004)
- Novák, Jiří On a conjecture of Turán. (Czech summary) (82h:05032)
- Odlyzko, Andrew M. See Guibas, Leo J., (82g:05007)
- Pavlov, A. I. The number of solutions of the equation $x^a = a$ in the symmetric group S_n . (Russian) (82d:10063)
- Peck, G. W. Erdős conjecture on sums of distinct numbers. (82e:10096)
- Perfect, Hazel See Bryant, Victor, (82d:05001)
- Pradhan, D. K. (with Kodandapani, K. L.) A framework for the study of permutations and applications to memory processor interconnection networks. (82d:94079)
- Rao, Daljit See Mohanty, S. P., (82g:05004)
- Rauzy, Gérard See Keane, Michael S., (82d:28014)
- Rotem, D. Stack sortable permutations. (82j:68051)
- Semba, Ichirō A note on enumerating combinations in lexicographical order. (82f:68037)
- On the numbers of permutations which are obtained using a stack with constrained depth, and their generating functions. (Japanese) (82k:05012)
- Sidorenko, A. F. The number of admissible linear orderings of a partially ordered set as a function of its incomparability graph. (Russian) (82e:05116)
- Singmaster, David ★Notes on Rubik's "magic cube". (82b:20005a)
- Sinickii, A. L. Solution of Knuth's problem on construction of permutations using a deque. (Russian) (82g:68033)
- Sirazdinov, S. H. Asymptotic expression for Euler numbers. (Russian) (82b:05010)
- Spears, William T. (with Jeffcott, Barbara; Jackson, D. M.) An algebraic theory of sequence enumeration. (82e:05018)
- Stanley, Richard P. Weyl groups, the hard Lefschetz theorem, and the Sperner property. (82j:20083)
- Steele, J. Michael Long unimodal subsequences: a problem of F. R. K. Chung. (82i:60029)
- Taylor, Alan D. Bounds for the disjoint unions theorem. (82g:05014)
- Tošić, Ratko An optimal search procedure. (82b:62131)
- Tsarpalias, A. A combinatorial theorem. (82j:04003)
- Varol, Y. L. On a subset of all the permutations of n marks. (82j:68053)
- Viennot, Gérard See Dumont, Dominique, (82j:10024)
- Vo, Kiem Phong The Schensted correspondence and lexicographic matchings on multisubset lattices. (82e:05006)
- Wei, Wan Di Generalized principle of inclusion and exclusion and its applications. (82c:05012)
- Wood, Derrick The towers of Brahma and Hanoi revisited. (82c:68031)
- Woodall, D. R. Dividing a cake fairly. (82f:28006)
- Zeilberger, Doron Enumeration of words by their number of mistakes. (82d:05016)
- Brini, Andrea See Barnabei, Marilena; et al., 82a:05008
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- (with Drews, Klaus-Dieter; Harnau, Walter; Lau, Dietlinde) Bedingt monotone Funktionen über einer endlichen Menge. II. 82c:05007b
- (with Drews, Klaus-Dieter; Harnau, Walter; Lau, Dietlinde) Bedingt monotone Funktionen über einer endlichen Menge. III. Cliquenzahl von gewissen Relationengraphen. 82c:05007c
- Cerasoli, Mauro The Möbius-Rota function as an enumeration method. (Italian. English summary) 82e:05006
- Charalambides, Ch. A. Bipartitional polynomials and their applications in combinatorics and statistics. 82d:05010
- Dacic, Rade M. Mersenne numbers and binomial coefficients. 82e:05007
- Drews, Klaus-Dieter See Buroschi, Gustav; et al., 82c:05007
- Flajolet, Philippe Combinatorial aspects of continued fractions. 82f:05002b
- Combinatorial aspects of continued fractions. 82f:05002a
- Garfinkel, Robert S. (with Selkow, Stanley M.) On some conjectures of Gould on the parities of the binomial coefficients. 82j:05006
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- Golomb, Solomon W. Iterated binomial coefficients. 82e:05009
- Harnau, Walter See Buroschi, Gustav; et al., 82c:05007
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- Karuppan Chetty, C. S. The number of odd binomial coefficients. 82k:05009
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- Lau, Dietlinde See Buroschi, Gustav; et al., 82c:05007
- Lothar, Dave An implicit triangle of numbers. 82j:05007
- Marlewski, Adam On the coefficients of some binomial expression. 82e:05011
- Mohanty, S. P. (with Rao, Daljit) Different shortest permutation strings $T(n)$ for $n=3, 4, 5, 6$ and 7 . 82g:05004
- Morris, Robert A. Frobenius endomorphisms in the umbral calculus. 82g:05005
- Puritz, C. W. Extending Pascal's triangle upwards. 82j:05008
- Rao, Daljit See Mohanty, S. P., 82g:05004
- Rosenberg, Ivo Structural rigidity. I. Foundations and rigidity criteria. 82e:05012
- Rota, Gian-Carlo See Barnabei, Marilena; et al., 82a:05008
- Roth, Arthur J. (with Sobel, Milton) A probabilistically attained set of polynomials that generate Stirling numbers of the second kind. 82m:05005
- Sachs, Horst See Hexel, Erhard, 82c:05008
- Selkow, Stanley M. See Garfinkel, Robert S., 82j:05006
- Sobel, Milton See Roth, Arthur J., 82m:05005
- Sugawara, Tamio Matrices giving relations among symmetric functions. 82j:05009
- Sulanke, Robert A. A generalized q -multinomial Vandermonde convolution. 82j:05010
- Thomas, Glanville P. A note on Young's raising operator. 82f:05003
- Todorov, Pavel G. On a new explicit representation of Euler numbers. (Russian. English summary) 82m:05006
- Waters, William M., Jr. An alternate formula for the j th coefficient of $(a+b)^{-n}$ and a surprising relationship to the triangle of Pascal. 82j:05011
- Zeilberger, Doron All binomial identities are verifiable. 82k:05010

secondary classifications:

05A10 Factorials, binomial coefficients, combinatorial functions

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- Barsky, Daniel (with Dumont, Dominique) Congruences pour les nombres de Genocchi de 2e espèce. (82m:10021)
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Bicknell-Johnson, Marjorie. Diagonal sums in the harmonic triangle. (82j:05005)

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Burge, William H. A correspondence between partitions related to generalizations of the Rogers-Ramanujan identities. (82e:05020)

Cohen, M. E. (with Sun, Hugo S.) On generating functions and double series expansions. (82e:05013)

(with Sun, Hugo S.) Further generalizations of the Brock-Carlitz identity. (82m:05009)

Edelman, Paul H. Zeta polynomials and the Möbius function. (82b:06002)

Freeman, J. M. Groups of substitutions and Eulerian differential operators. (82h:05004)

Garsia, Adriano M. A q -analogue of the Lagrange inversion formula. (82m:05010)

Geth, Seyoum (with Shapiro, Louis W.) A natural proof of Abel's identity. (82d:05055)

Girso, Robert D. The number of conjugacy classes of the alternating group. (82d:10024)

Klein, Douglas J. Extension of the Dirac identity. (82c:81055)

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(with Wilson, Robert Lee) A new family of algebras underlying the Rogers-Ramanujan identities and generalizations. (82k:10016)

Logothetti, Dave. An implicit triangle of numbers. (82j:05007)

Milne, Stephen C. See Lepowsky, James. (82f:17005)

Rodionov, V. I. A relation in finite topologies. (Russian) (82k:54062)

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Snow, Donald R. A functional inequality arising in combinatorics. (82e:39008)

Srivastava, Hari M. Some polynomial expansions for functions of several variables. (82m:33002)

Štulić, Predrag. A discovery of Euler and some of its consequences. (Serbo-Croatian) (82f:01041)

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Frankl, Peter. On large vector systems with equal scalar products. (82j:05022)

Goldberg, Moshe S. (with Straus, Ernst G.) Combinatorial inequalities, matrix norms, and generalized numerical radii. (82c:05024)

Neuman, Edward. Note on Stirling numbers of the first and second kinds. (Serbo-Croatian summary) (82m:05017)

Redheffer, Raymond M. (with Smith, Carey) The case $n=2$ of the Goldberg-Straus inequality. (82e:05025)

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Straus, Ernst G. See Goldberg, Moshe S., (82e:05024)

secondary classifications:

Cesari, Adolf. A proof of the arithmetic mean-geometric mean inequality. (82g:26024)

Daykin, David E. A hierarchy of inequalities. (82e:26019)

Gouyou-Beauchamps, D. Sur un résultat récent de Laurent Chottin. (82g:68020)

Györfi, Ervin (with Turán, György) Stack of pancakes. (82m:05002)

Kleitman, Daniel J. (with Shearer, James B.) A monotonicity property of partial orders. (82f:06003)

Milne, Stephen C. Peano curves and smoothness of functions. (82e:26017)

Numata, Minoru. Another proof of the Erdős-Chao Ko-Rado theorem. (Japanese) (82h:05016)

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Turán, György. See Györfi, Ervin, (82m:05002)

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Allaway, Wm. R. (with Yuen, K. W.) Ring isomorphisms for the family of Eulerian differential operators. (82d:05022)

Barnabei, Mariena (with Brini, Andrea; Nicoletti, Giorgio) Polynomial sequences of integral type. (82c:05016)

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Freund, Robert M. (with Todd, Michael J.) A constructive proof of Tucker's combinatorial lemma. (82k:05016)

Hutchinson, Joan P. (with Trow, Paul B.) Some pigeonhole principle results extended. (82g:05016)

Newman, B. B. The flippin' coins problem. (82i:05007)

Nicoletti, Giorgio. See Barnabei, Mariena; et al., (82c:05016)

Reiner, David L. Eulerian binomial type revisited. (82d:05023)

Todd, Michael J. See Freund, Robert M., (82k:05016)

Trow, Paul B. See Hutchinson, Joan P., (82g:05016)

Yang, Kung Wei. Integration in the umbral calculus. (82i:05008)

Yuen, K. W. See Allaway, Wm. R., (82d:05022)

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Apostolico, Alberto ★Some linear time algorithms for string statistics problems. (82m:68062)

d'Arienzo, Emilia (with Franciosi, Michelangelo) On the extension of finitely additive functions. (Italian. English summary) (82e:28003)

Berresford, Geoffrey C. The uniformity assumption in the birthday problem. (82c:60001)

de Bruijn, N. G. Sequences of zeros and ones generated by special production rules. (82i:10074)

Buzyckii, P. L. (with Freiman, G. A.) On the possibilities of solving combinatorial problems by analytic methods. (82m:10075)

Canfield, E. Rodney. A Sperner property preserved by product. (82b:06001)

Cardon, A. (with Crochemore, M.) Détermination de la représentation standard d'une série reconnaissable. (English summary) (82m:68076)

Crochemore, M. See Cardon, A., (82m:68076)

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Franciosi, Michelangelo. See d'Arienzo, Emilia, (82e:28003)

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Garsia, Adriano M. Combinatorial methods in the theory of Cohen-Macaulay rings. (82f:06002)

Grünbaum, Branko. Two-coloring the faces of arrangements. (82h:51029)

Herda, Hans. See Fraenkel, Aviezri S., (82f:90101)

Ito, Stephen Y. The string merging problem. (82f:68034)

Klarner, David A. Mathematical crystal growth. I. (82e:05016)

Kleitman, Daniel J. (with Li, Shuo-Yen Robert) On the partial sums of the rearrangements of a complex series. (82c:30066)

Klove, Torleiv. The modular n -queen problem. II. (82k:05034)

Lenstra, H. W., Jr. Nim multiplication. (82c:04002)

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Melzak, Z. A. Multi-indexing and multiple clustering. (82c:60018)

Pouzet, Maurice. Application de la notion de relation presque-enchainable au dénombrement des restrictions finies d'une relation. (82k:03050)

Prodinger, Helmut. The average height of a stack where three operations are allowed and some related problems. (82m:05013)

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(Ikeda, Sadao) See Essays: Probability and statistics, (82a:62005)

Kiefer, Jack Carl. Optimal design theory in relation to combinatorial design. (82a:62107)

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(Okamoto, Masashi) See Essays: Probability and statistics, (82a:62005)

(Siotani, Minoru) See Essays: Probability and statistics, (82a:62005)

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Combinatorial structures of configurations ★Combinatorial structures of configurations. (Japanese) (82g:05002)

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Isle of Thorns, Finite Geometries and Designs ★Finite geometries and designs. (82g:05003)

Essays:

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Finite group theory and neighboring areas ★Finite group theory and neighboring areas. (Japanese) (82g:20001)

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Bruen, Aiden A. Blocking sets and skew subspaces of projective space. 82j:05025

Carmony, Lowell A. (with Tan, Soon Teck) s -quasisymmetry. 82j:05026

Chan, Agnes Hui (with Ray-Chaudhuri, D. K.) Embedding of a pseudoresidual design into a Möbius plane. 82a:05018

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Street, Anne Penfold Some designs with block size three. 82f:05014

Street, Deborah J. (with Rodger, Christopher A.) Some results on Bhaskar Rao designs. 82f:05015

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Wolf, Karl Erich Uniqueness of the rank polynomials of point stable designs. 82d:05030

secondary classifications:

Bachmann, O. On rank 4 projective planes. (82b:51014)

Belov, N. V. See Rau, V. G.; et al., (82e:10023) and (82e:10016)

Bénéteau, Lucien Une classe particulière de matroïdes parfaits. (English summary) (82d:05046)

Bermond, J.-C. (with Huang, Charlotte; Rosa, Alexander; Sotteau, D.) Decomposition of complete graphs into isomorphic subgraphs with five vertices. (82c:05079)

Biggs, Norman (with Ito, Tatsuhiro) Graphs with even girth and small excess. (82b:05079)

Cameron, Peter J. (with van Lint, Jacobus Hendricus) ★Graphs, codes and designs. (82d:05002)

(with van Lint, Jacobus Hendricus) ★Теория графов, теория кодирования и блок-схемы. (Russian) [Graph theory, coding theory and block designs] (82d:05003)

Cheng, Ch'ing Shui (with Wu, Chien Fu) Balanced repeated measurements designs. (82c:62100)

Optimality and construction of pseudo-Youden designs. (82j:62059)

Chung, F. R. K. On switching networks and block designs. II. (82g:94025)

Colbourn, Charles J. See Colbourn, Marlene J., (82e:68038) and (82f:05031)

Colbourn, Marlene J. (with Colbourn, Charles J.) The complexity of combinatorial isomorphism problems. (82e:68038)

(with Colbourn, Charles J.) Concerning the complexity of deciding isomorphism of block designs. (82f:05031)

Das, A. D. (with Saha, G. M.) A note on duals of some T_m -type PBIB designs. (82j:62107)

Dehon, Michel Ranks of incidence matrices of $(2,3)$ -coverings. (82g:05025)

Deza, M. (with Singhi, N. M.) Some properties of perfect matroid designs. (82d:05047)

Feng, Ke Qin (with Wu, Li Sheng; Zhu, Lie) Affine classification of Boolean functions and the construction of $3-(\lambda, k, 2^t)$ designs. (Chinese) (82d:94071a)

Fuji-Hara, R. (with Vanstone, S. A.) On automorphisms of doubly resolvable designs. (82e:05034)

(with Vanstone, S. A.) On the spectrum of doubly resolvable Kirkman systems. (82j:05039)

Gardner, Ben (with Vanstone, S. A.) Some results on irreducible (r, λ) -designs. (82d:05045)

Gronau, Hans-Dietrich O. F. The $2-(11,5,2)$ and $3-(12,6,2)$ designs. (82j:05040a)

- The 2-(10, 4, 2) designs. (82j:05040b)
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- Hering, Franz Block designs with cyclic block structure. (82f:05021)
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- Ijhuin, V. V. See Rau, V. G.; et al., (82e:10023) and (82i:10016)
- Ito, Tatsuro See Biggs, Norman, (82h:05079)
- Janko, Zvonimir (with Tran Van Trung) Projective planes of order 10 do not have a collineation of order 3. (82h:51015)
- Jasikiewicz, T. On existence of UMVUE for each estimable parametric function of variance covariance components in block designs. (German and Russian summaries) (82c:62149)
- Jungerman, Mark (with Stahl, Saul; White, Arthur T.) Imbeddings of hypergraphs. (82f:05035)
- Kageyama, Sanpei A condition for the existence of certain resolvable 2-designs. (82a:62119)
- Note on designs in serology. (82c:62104)
- On balanced incomplete block designs with $v=2k$. (82g:62108)
- Some bounds for partially balanced block designs. (82g:62109)
- Laycock, P. J. (with Seiden, Esther) On a problem of repeated measurement design with treatment additivity. (82a:62110)
- Li, Shuo-Yen Robert See Li, Wen Ch'ing Winnie, (82d:10033)
- Li, Wen Ch'ing Winnie (with Li, Shuo-Yen Robert) On generators of ideals associated with unions of linear varieties. (82c:10033)
- van Lint, Jacobus Hendricus See Cameron, Peter J., (82d:05002) and (82d:05003)
- Neumaier, Arnold Cliques and claws in edge-transitive strongly regular graphs. (82c:05085)
- Pandian, V. S. Soundara Some properties for balanced n -ary designs. (82m:62178)
- Parhomov, L. G. See Rau, V. G.; et al., (82c:10023) and (82i:10016)
- Pelling, M. J. (with Rogers, D. G.) Some $(2, n)$ combinatorial Stein groupoids. (82f:20101)
- Rau, V. G. (with Parhomov, L. G.; Ijhuin, V. V.; Belov, N. V.) On the number of possible Patterson cyclotomic sets. (Russian) (82c:10023)
- (with Parhomov, L. G.; Ijhuin, V. V.; Belov, N. V.) On the calculation of Patterson cyclotomic sets. (Russian) (82i:10016)
- Rogers, D. G. See Pelling, M. J., (82f:20101)
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- Ryser, H. J. Matrices and set intersections. (82k:05029)
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- (Stečkin, B. S.) See Cameron, Peter J.; et al., (82f:05003)
- Stroeker, R. J. On the Diophantine equation $(2y^2-3)^2=x^2(3x^2-2)$ in connection with the existence of nontrivial tight 4-designs. (82j:10032)
- Thompson, Donald M. Eigengraphs: constructing strongly regular graphs with block designs. (82m:05054)
- Tran Van Trung See Janko, Zvonimir, (82h:51015)
- Ustimenko-Bakumovskii, V. A. Strongly regular graphs invariant with respect to groups $[y_n]^{n-1}$ when $n \geq 3$. (Russian) (82f:05053)
- Vanstone, S. A. See Gardner, Ben, (82d:05045); Fuji-Hara, R., (82e:05034) and (82j:05039)
- White, Arthur T. See Jungerman, Mark; et al., (82f:05035)
- Wu, Chien Fu See Cheng, Ch'ing Shui, (82c:62100)
- Wu, Li Sheng (with Zhu, Lie) Affine classification of Boolean functions and the construction of $3-(A, k, 2^n)$ designs. II. (Chinese) (82d:94071b)
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- Theory of experimental layouts and its applications ★Theory of experimental layouts and its applications. (82d:05006)
- 05B07 Steiner triple systems
- Assmus, E. F., Jr. (with Novillo Sardi, J. E.) Generalized Steiner systems of type $3-(v, \{4, 6\}, 1)$. 82i:05012
- Dehan, M. (with Surmont, J.) Characterization of 5-designs on the one-dimensional projective geometry of 24 points. 82e:05031
- Hamada, Noboru The geometric structure and the p -rank of an affine triple system derived from a nonassociative Moufang loop with the maximum associative center. 82k:05021
- Hauck, Peter Eine Charakterisierung des Steinersystems $S(5, 8, 24)$. (English summary) [A characterization of the Steiner system $S(5, 8, 24)$] 82m:05022
- Mathon, Rudolf A. (with Phelps, Kevin T.; Rosa, Alexander) A class of Steiner triple systems of order 21 and associated Kirkman systems. 82k:05022
- Novillo Sardi, J. E. See Assmus, E. F., Jr., 82i:05012
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- Sloane, N. J. A. (with Thompson, John G.) The nonexistence of a certain Steiner system $S(3, 12, 112)$. 82m:05023
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- Bertani, Laura On some incidence structures. (82j:51014)
- Brouwer, Andries (with Lenz, Hanfried) Unterräume von Blockplänen. (82e:05026)
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- Saxl, Jan On points and triples of Steiner triple systems. (82j:20012)
- 05B10 Difference sets (number-theoretic, group-theoretic, etc.) [See also 10L05.]
- Alekseev, V. E. Two constructions of difference sets. (Russian) 82m:05024
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- Welsh, D. J. A. Colourings, flows and projective geometry. **(82b:05002)**
- Bibliography:
- Tutte, William T. Papers and books by W. T. Tutte. **(82c:01108)**
- Combinatorial analysis ★Проблемы комбинаторного анализа. (Russian) [Problems of combinatorial analysis] **(82d:05005)**
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- Chaiken, Seth (with Kleitman, Daniel J.; Saks, Michael E.; Shearer, James B.) Covering regions by rectangles. **(82m:52007)**
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- Fowler, Robert J. (with Paterson, Michael S.; Tanimoto, Steven L.) Optimal packing and covering in the plane are NP-complete. **(82c:05112)**
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- Shearer, James B. See Chaiken, Seth; et al., **(82m:52007)**
- Stanton, R. G. (with Mullin, R. C.) Some new results on the covering numbers $N(t, k, v)$. **(82g:05022)**
(with Bate, John Aubrey) A computer search for B -coverings. **(82b:05015)**
- Szabó, Sándor Finite abelian groups and n -dimensional mosaics. (Hungarian) **(82i:20065)**
- Tanimoto, Steven L. See Fowler, Robert J.; et al., **(82c:05112)**
- 05B45 Tessellation and tiling problems
- de Bruijn, N. G. Algebraic theory of Penrose's nonperiodic tilings of the plane. I, II. **82c:05055**

- Duijvestijn, A. J. W. (with Leeuw, P.) Lowest order squared rectangles and squares with the largest element not on the boundary. **82j:05047**
- Elliott, C. S. Squaragons. **82a:05042**
- Giles, Jack, Jr. The Gypsy method of superfigure construction. **82b:05053**
- Grünbaum, Branko (with Shephard, Geoffrey C.) A hierarchy of classification methods for patterns. **82j:05048**
- Klamkin, Murray S. (with Liu, Andy C. F.) Note on a result of Niven on impossible tessellations. **82d:05053**
- Leeuw, P. See Duijvestijn, A. J. W., **82j:05047**
- Liu, Andy C. F. See Klamkin, Murray S., **82d:05053**
- Miller, J. C. P. On rotational tessellations and cosets. **82c:05056**
- Pach, J. On the permeability problem. **82f:05028**
- Purdy, George B. (with Wetzel, John E.) Two-coloring inequalities for Euclidean arrangements in general position. **82a:05043**
- Shephard, Geoffrey C. See Grünbaum, Branko, **82j:05048**
- Valette, Alain. Tilings of the plane by topological disks. **82m:05032**
- Wetzel, John E. See Purdy, George B., **82a:05043**

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- Adler, Andrew (with Holroyd, F. C.) Some results on one-dimensional tilings. **(82i:52022)**
- Debroy, Ingrid (with Landuyt, F.) Equitransitive edge-to-edge tilings by regular convex polygons. **(82c:52011)**
- Delandtsheer, Anne (with Vanden Cruyce, Patricia) Orbits of edge-to-edge tilings by equilateral triangles, squares and regular hexagons. **(82g:52012)**
- Graham, Ronald L. Fault-free tilings of rectangles. (See **82b:00003**)
- Grünbaum, Branko (with Shephard, Geoffrey C.) Some problems on plane tilings. (See **82b:00003**)
- Holroyd, F. C. See Adler, Andrew, **(82i:52022)**
- Landuyt, F. See Debroy, Ingrid, **(82c:52011)**
- Schattschneider, Doris. In praise of amateurs. (See **82b:00003**)
- Shephard, Geoffrey C. See Grünbaum, Branko, (See **82b:00003**)
- Tutte, William T. Dissections into equilateral triangles. (See **82b:00003**)
- Vanden Cruyce, Patricia. See Delandtsheer, Anne, **(82g:52012)**

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- Clarke, Andrew L. Isoperimetric polyominoes. **82c:05057**
- Klarner, David A. My life among the polyominoes. (See **82b:00003**)
- Lautsch, Richard G. Rectangles from mixed polyomino sets. **82f:05029**
- Rands, B. M. L. (with Welsh, D. J. A.) Animals, trees and renewal sequences. **82j:05049**
- Welsh, D. J. A. See Rands, B. M. L., **82j:05049**

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- Bouwkamp, C. J. Packing handed pentacubes. (See **82b:00003**)

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- Arkin, Joseph (with Straus, Ernst G.) Orthogonal Latin systems. **82m:05033**
- Deza, M. (with Frankl, Peter) Every large set of equidistant $(0, +1, -1)$ -vectors forms a sunflower. **82m:05034**
- Frankl, Peter. See Deza, M., **82m:05034**
- Hakimi, S. Louis (with Schmeichel, E. F.) The number of triangles in a triangulation of a set of points in the plane. **82a:05044**
- Rédei, L. To the mathematical theory of "fifteenth-puzzle". **82c:05058**
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- Straus, Ernst G. See Arkin, Joseph, **82m:05033**

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- Baclawski, Kenneth. The Möbius algebra as a Grothendieck ring. **(82k:18002)**
- Celmins, Uldis A. The Hungarian magic cube puzzle. **(82d:20009)**
- Grünbaum, Branko (with Shephard, Geoffrey C.) Satins and twills: an introduction to the geometry of fabrics. **(82k:52017)**
- Haigh, Gordon A. "natural" approach to Pick's theorem. **(82b:51001)**
- Hsü, Chên Jung (with Yang, Shu Wên) A direct proof that a partition lattice is meet-continuous. **(82c:06017)**
- Itoga, Stephen Y. A generalization of the stable marriage problem. **(82m:90008)**
- Maheo, Maryvonne. Strongly graceful graphs. **(82j:05093)**
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- Trigg, Charles W. Antimagic pentagrams with line sums in arithmetic progression, $\Delta=3$. **(82i:10017)**
- Turner, Barbara (with Warner, Ken) The structure and geometry of 4×4 pandiagonal matrices. **(82f:20012)**
- Warner, Ken. See Turner, Barbara, **(82f:20012)**
- Yang, Shu Wên. See Hsü, Chên Jung, **(82c:06017)**
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- (Hansen, Pierre) See A look at graph theory, **82d:05054**
- (de Werra, D.) See A look at graph theory, **82d:05054**
- A look at graph theory ★Regards sur la théorie des graphes. (French) [A look at graph theory] **82d:05054**
- Cerisy ★Regards sur la théorie des graphes. (French) [A look at graph theory] **82d:05054**

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- A Look at Graph Theory ★Regards sur la théorie des graphes. (French) [A look at graph theory] **82d:05054**
- Graph theory ★Regards sur la théorie des graphes. (French) [A look at graph theory] **82d:05054**

secondary classifications:

- Cameron, Peter J. (with van Lint, Jacobus Hendricus) ★Graphs, codes and designs. **(82d:05002)**
- (with van Lint, Jacobus Hendricus) ★Теория графов, теория кодирования и блок-схемы. (Russian) [Graph theory, coding theory and block designs] **(82d:05003)**
- Gondran, Michel (with Minoux, Michel) ★Graphes et algorithmes. (French) [Graphs and algorithms] **(82g:68059)**
- Haggard, Gary ★Excursions in graph theory. **(82m:05001)**
- Jäger, Joachim ★Elementare Topologie. (German) [Elementary topology] **(82j:54001)**
- Lefner, Günter ★Elemente der Topologie und Graphentheorie. (German) [Elements of topology and graph theory] **(82b:05001)**
- van Lint, Jacobus Hendricus. See Cameron, Peter J., **(82d:05002)** and **(82d:05003)**
- (Lovász, László) See Algebraic methods in graph theory, **(82k:05002)**
- Minoux, Michel. See Gondran, Michel, **(82g:68059)**
- Nash-Williams, C. St. J. A. A note on some of Professor Tutte's mathematical work. **(82c:01079)**
- Ore, Oystein ★Теория графов. (Russian) [Theory of graphs] **(82c:05002)**
- (Sós, Vera T.) See Algebraic methods in graph theory, **(82k:05002)**
- (Stečkin, B. S.) See Cameron, Peter J.; et al., **(82d:05003)**
- Swamy, M. N. S. (with Thulasiraman, K.) ★Graphs, networks, and algorithms. **(82j:94030)**
- Thulasiraman, K. See Swamy, M. N. S., **(82j:94030)**
- Tucker, Alan ★Applied combinatorics. **(82f:05001)**
- (Tutte, William T.) See Nash-Williams, C. St. J. A., **(82c:01079)** and Bibliography: Tutte, William T., **(82c:01108)**
- (Vrublevskaja, I. N.) See Ore, Oystein, **(82c:05002)**
- Algebraic methods in graph theory ★Algebraic methods in graph theory. Vol. I, II. **(82k:05002)**
- Applied combinatorial theory and algorithms ★Applied combinatorial theory and algorithms. **(82g:05001)**
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- Colloquia Mathematica Societatis János Bolyai ★Algebraic methods in graph theory. Vol. I, II. **(82k:05002)**
- Combinatorial theory ★Applied combinatorial theory and algorithms. **(82g:05001)**
- Combinatorics ★Graphs and combinatorics. III. **(82b:05003)**
- Conference: Algebraic Methods in Graph Theory ★Algebraic methods in graph theory. Vol. I, II. **(82k:05002)**
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- Szeged ★Algebraic methods in graph theory. Vol. I, II. **(82k:05002)**

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- Blass, Andreas (with Harary, Frank; Miller, Zevi) Which trees are link graphs? **82h:05016**
- Bloom, Gary S. A chronology of the Ringel-Kotzig conjecture and the continuing quest to call all trees graceful. **82g:05041**
- Burr, Stefan A. Subtrees of directed graphs and hypergraphs. **82f:05030**
- Planting trees. (See **82b:00003**)
- Cai, Mao Cheng. See Liu, Zhen Hong; et al., **82a:05045**
- Caro, Y. (with Schönheim, J.) Generalized 1-factorization of trees. **82c:05041**
- Chung, F. R. K. (with Graham, Ronald L.; Coppersmith, D.) On trees containing all small trees. **82m:05035**
- (with Graham, Ronald L.) Universal caterpillars. **82m:05036**
- Colbourn, Charles J. See Colbourn, Marlene J., **82f:05031**
- Colbourn, Marlene J. (with Colbourn, Charles J.) Concerning the complexity of deciding isomorphism of block designs. **82f:05031**
- Coppersmith, D. See Chung, F. R. K.; et al., **82m:05035**
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- See also Hendy, M. D.; et al., **82h:05017** and Robinson, D. F., **82m:05041**
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- Godsil, C. D. Equiarboreal graphs. **82m:05038**
- Goulden, I. P. See Jackson, D. M., **82f:05032**
- Graham, Ronald L. See Chung, F. R. K.; et al., **82m:05035** and **82m:05036**
- Grimmett, Geoffrey. Random labelled trees and their branching networks. **82g:05042**
- Harary, Frank. See Blass, Andreas; et al., **82h:05016**
- Hendy, M. D. (with Foulds, L. R.; Penny, D.) Proving phylogenetic trees minimal with l -clustering and set partitioning. **82h:05017**
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- Anisimov, A. V.** Discrete backtracking converters. **(82h:68079)**
- Arnold, André** (with Nivat, Maurice) The metric space of infinite trees. Algebraic and topological properties. **(82g:68037)**
- Banaszak, Zbigniew** Coding of rooted trees by the maximal path method. (Polish. English and Russian summaries) **(82c:68042)**
- Bange, David W.** (with Barkauskas, Anthony E.; Slater, Peter J.) Fibonacci numbers in tree counts for maximal outerplane and related graphs. **(82c:05077)**
- Barkauskas, Anthony E.** See Bange, David W.; et al., **(82c:05077)**
- Baudisch, Andreas** (with Seese, Detlef G.; Tuschik, Hans-Peter; Weese, Martin) ★Decidability and generalized quantifiers. **(82i:03048)**
- Becker, Ronald I.** (with Perl, Yehoshua; Schach, Stephen R.) A shifting algorithm for min-max tree partitioning. **(82c:68018)**
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- Harary, Frank** (with Sumner, David) The dichromatic number of an oriented tree. **(82f:05040)**
- (with Tindell, Ralph) Every forest can be obtained from a minimal block. **(82c:05091)**
- Hedetniemi, Sandra Mitchell** (with Hedetniemi, Stephen T.; Slater, Peter J.) A note on packing two trees into K_n . **(82j:05086)**
- Hedetniemi, Stephen T.** See Hedetniemi, Sandra Mitchell; et al., **(82j:05086)**
- Hodges, Wilfrid** Encoding orders and trees in binary relations. **(82k:03040)**
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- Karejan, Z. A.** Arboricity of digraphs. (Russian. Armenian summary) **(82h:05025)**
- Karotński, Michał** (with Palka, Zbigniew) Addendum and erratum to the paper: "On the size of a maximal induced tree in a random graph" [Math. Slovaca **30** (1980), no. 2, 151-155; MR **81k:05093**]. **(82c:05082)**
- Katajainen, J.** See Nevalainen, O.; et al., **(82h:68092)**
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- Brown, Thomas Craig On van der Waerden's theorem and the theorem of Paris and Harrington. **(82i:10078)**
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- Benzaken, C. Critical hypergraphs for the weak chromatic number. **(82g:05067)**

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- Deed, Ernesto The reconstructibility of the characteristic polynomial of the line-graph of a graph. (Italian. English summary) **(82k:05078)**
- McAveney, Kevin L. A conjecture on two-point deleted subgraphs of Cartesian products. **(82i:05065)**

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- Benzaken, C. Critical hypergraphs for the weak chromatic number. **82g:05067**
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- Ahlswede, Rudolf Coloring hypergraphs: a new approach to multi-user source coding. II. **(82j:94012)**
- Batini, Carlo (with D'Atri, Alessandro) Schema hypergraphs: a formalism to investigate logical data base design. **(82b:68017)**
- Berge, Claude Balanced matrices and property (G). **(82d:05080)**
- Brouwer, Andries (with Tijdeman, R.) On the edge-colouring problem for unions of complete uniform hypergraphs. **(82m:05043)**
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- Burr, Stefan A. Subtrees of directed graphs and hypergraphs. **(82i:05030)**
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- Dürfler, W. Double covers of graphs and hypergraphs. **(82c:05074)**
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- Nešetřil, Jaroslav (with Poljak, Svatopluk; Turzik, Daniel) Amalgamation of matroids and its applications. **(82k:05080)**
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- Ahlsweide, Rudolf Coloring hypergraphs: a new approach to multi-user source coding. II. (82j:94012)
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- Bodendick, R. (with Wagner, K.) Zur Abschätzung der Anzahl von Kreuzhauben. (82g:05043)
- Exoo, Geoffrey On an adjacency property of graphs. (82a:05068)
- Frucht, Roberto W. Graceful numbering of wheels and related graphs. (82e:05113)
- McKenzie, D. S. Discrete physical systems. (82m:82012)
- Poljak, Svatopluk (with Rödl, Vojtěch) On set systems determined by intersections. (82e:05102)
- Rödl, Vojtěch See Poljak, Svatopluk. (82e:05102)
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- Taconet, B. A new method for asynchronous sequential systems design: synthesis by partition of the states graph. (French and German summaries) (82m:94068)
- Takamizawa, K. (with Nishizeki, Takao; Saito, Nobuji) Combinatorial problems on series-parallel graphs. (82c:05085)
- Tenenbaum, L. A. See Gusev, L. A.; et al. (82c:68128)
- Thiagarajan, P. S. See Genrich, H. J.; et al. (82c:68112)
- Thiel, L. See Lam, C. W. H.; et al. (82c:05002)
- Tinhofer, Gottfried On the use of some almost sure graph properties. (82h:68096)
- Trinajstić, N. See Džonova-Jerman-Blazić, B.; et al. (82m:92093)
- Truzzi, Marcello See Harary, Frank, (82c:00004)
- Turgeon, J. See Kotzig, Anton, (82c:05023)
- Tuskina, T. A. See Sohranskaja, V. S., (82c:68039)
- Vartak, M. N. See Rao, P. R., (82c:05062)
- Walther, Hans-Joachim (with Schäuble, Manfred) Über den Shortness Exponenten normaler Landkarten. (82c:05089)
- Welzl, E. On the density of color-families. (82m:68128)
- Wettstein, H. Locking operations for maximum concurrency. (82m:68050)
- Wexler, P. J. See Bloom, Gary S.; et al., (82c:68032)
- Wilson, Stephen E. See Doro, Stephen, (82c:20048)
- Wirth, Karl (with Huber, Martin K.) Numbering of finite relational systems. (82m:68079)
- Wisztová, Elena See Nebeský, Ladislav, (82g:05074)
- Witt, Kurt-Ulrich On linearizing graphs. (82j:68015)
- Wu, F. Y. On the equivalence of the Ising model with a vertex problem. (82f:82012)
- Zelinka, Bohdan Bases of classes of trees closed under subdivisions. (Russian summary) (82c:05044)
- Some remarks on domatic numbers of graphs. (Czech summary) (82m:05065)
- Boulder, Colo. ★Computer-assisted analysis and model simplification. (82g:00016)
- Combinatorics ★Theory of experimental layouts and its applications. (82d:05006)
- Computer-assisted analysis and model simplification ★Computer-assisted analysis and model simplification. (82g:00016)
- Synopsis:
- Computer-Assisted Analysis and Model Simplification ★Computer-assisted analysis and model simplification. (82g:00016)
- Theory of Experimental Layouts and its Applications ★Theory of experimental layouts and its applications. (82d:05006)
- Theory of experimental layouts and its applications ★Theory of experimental layouts and its applications. (82d:05006)

06-XX ORDER, LATTICES, ORDERED ALGEBRAIC STRUCTURES [See also 18B35.]

06-01 Elementary exposition, textbooks

Birkhoff, Garrett ★Lattice theory. 82a:06001

06-02 Advanced exposition (research surveys, monographs, etc.)

Grätzer, G. General lattice theory: 1979 problem update. 82d:06001

06-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

(Boole, George) See Laita, Luis M., (82m:01047)

(Boole, Mary Everest) See Laita, Luis M., (82m:01047)

Laita, Luis M. Boolean algebra and its extra-logical sources: the testimony of Mary Everest Boole. (82m:01047)

06-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

Dai, Da Wei A kind of matrix representation of a free distributive lattice and evaluation of its order. (Chinese. English summary) (82h:06009)

06-06 Proceedings, conferences, etc.

secondary classifications:

(Amayo, Ralph K.) See Algebra, (82d:20004)

(Golunkov, Ju. V.) See Probabilistic methods and cybernetics, (82d:68002)

Algebra ★Algebra, Carbondale 1980. (82d:20004)

Carbondale, Ill. ★Algebra, Carbondale 1980. (82d:20004)

Conference:

Southern Illinois, Algebra ★Algebra, Carbondale 1980. (82d:20004)

Cybernetics ★Вероятностные методы и кибернетика. Вып. 17. (Russian) [Probabilistic methods and cybernetics. No. 17] (82d:68002)

Group theory ★Algebra, Carbondale 1980. (82d:20004)

Lie algebras ★Algebra, Carbondale 1980. (82d:20004)

Probabilistic methods and cybernetics ★Вероятностные методы и кибернетика. Вып. 17. (Russian) [Probabilistic methods and cybernetics. No. 17] (82d:68002)

06Axx Ordered sets

06A05 Total order

Glass, A. M. W. Elementary types of automorphisms of linearly ordered sets—a survey. 82c:06001

(with Gurevich, Yuri; Holland, W. Charles; Shelah, Saharon) Rigid homogeneous chains. 82c:06001

Gurevich, Yuri See Glass, A. M. W.; et al., 82c:06001

Holland, W. Charles See Glass, A. M. W.; et al., 82c:06001

Kenzenbaev, S. Ordered systems of natural numbers. (Kazakh) (See 82f:34003)

Pinus, A. G. A characterization of the category of linearly ordered sets. (Russian) 82j:06001

Scott, Brian M. A characterization of well-orders. 82i:06001

Shelah, Saharon See Glass, A. M. W.; et al., 82c:06001

Sturm, Teo Universal coretracts in some categories of chains and Boolean algebras. 82d:06002

secondary classifications:

Baudisch, Andreas (with Seese, Detlef G.; Tuschik, Hans-Peter; Weese, Martin)

★Decidability and generalized quantifiers. (82i:03048)

Frasnay, Claude Sur quelques classes universelles de relations m -aires. (82h:04002)

Glass, A. M. W. (with Gurevich, Yuri; Holland, W. Charles; Jambu-Giraudet, Michèle) Elementary theory of automorphism groups of doubly homogeneous chains. (82i:03047)

Gurevich, Yuri See Glass, A. M. W.; et al., (82i:03047)

Herre, Heinrich (with Wolter, Helmut) Untersuchungen zur Theorie der linearen

Ordnung in Logiken mit Mächtigkeitsquantoren. (82j:03008)

Holland, W. Charles See Glass, A. M. W.; et al., (82i:03047)

Jambu-Giraudet, Michèle See Glass, A. M. W.; et al., (82i:03047)

Lerman, Manuel On recursive linear orderings. (82i:03059)

Rado, Richard Theorems on intervals of ordered sets. (82i:05037)

Rommel, Jeffrey B. Recursively categorical linear orderings. (82j:03037)

Seese, Detlef G. See Baudisch, Andreas; et al., (82i:03048)

Tovey, Craig A. See West, Douglas B., (82h:06002)

Tuschik, Hans-Peter See Baudisch, Andreas; et al., (82i:03048)

Weese, Martin See Baudisch, Andreas; et al., (82i:03048)

West, Douglas B. (with Tovey, Craig A.) Semiantichains and unichain coverings in direct products of partial orders. (82h:06002)

Wolter, Helmut See Herre, Heinrich, (82j:03008)

06A10 Partial order

Abian, Alexander Molecules of a partially ordered set. 82c:06002

- Adamović, Dušan D. On relations between local and global monotony of mappings of ordered sets. **82j:06002**
- Babaei, E. A. Ordered sets with a zero and a one, topological spaces and semiheaps of mappings. (Russian. Azerbaijani and English summaries) **82h:06001**
- Bardwell, Maureen A. A class of partially ordered sets whose groups of order automorphisms are lattice-ordered. **82c:06003**
- Björner, Anders Homotopy type of posets and lattice complementation. **82i:06001**
- Brini, Andrea Some homological properties of partially ordered sets. **82m:06001**
- Canfield, E. Rodney A Sperner property preserved by product. **82b:06001**
- Dhar, Deepak Asymptotic enumeration of partially ordered sets. **82c:06004**
- Duffus, Dwight (with Rival, Ivan; Simonovits, M.) Spanning retracts of a partially ordered set. **82c:06005**
(with Rival, Ivan) A structure theory for ordered sets. **82f:06001**
(with Pouzet, Maurice; Rival, Ivan) Complete ordered sets with no infinite antichains. **82j:06003**
- Edelman, Paul H. Zeta polynomials and the Möbius function. **82b:06002**
The Bruhat order of the symmetric group is lexicographically shellable. **82j:06004**
- Garsia, Adriano M. Combinatorial methods in the theory of Cohen-Macaulay rings. **82f:06002**
- Kalinin, V. V. Dimension functions on an orthomodular partially ordered set. (Russian) **82c:06006**
- Kelly, David On the dimension of partially ordered sets. **82j:06005**
- Kerner, Otto Partially ordered sets of finite representation type. **82j:06006**
- Kleitman, Daniel J. (with Shearer, James B.) A monotonicity property of partial orders. **82f:06003**
- Klukowski, Julian (with Lapińska-Różalska, Cecylia) On some representations of Post posets. **82j:06001**
- Koester, G. Über direkte Produkte Sperrerscher Halbordnungen. **82d:06003**
- Kreweas, G. Polynômes de Stanley et extensions linéaires d'un ordre partiel. (English summary) **82j:06007**
- Kriegel, Andreas A characterization of reduced incidence algebras. **82c:06002**
- Krishna Murty, M. (with Rao, G. C.) Neutrality in posets. **82m:06002**
- Kurepa, Đuro On some intercalations in ordered sets. **82b:06003**
- Lapińska-Różalska, Cecylia See Klukowski, Julian, **82j:06001**
- Maryland, Wallace, Jr. Results on finite connected partially ordered sets. **82m:06003**
- Mashburn, J. D. Three counterexamples concerning ω -chain completeness and fixed point properties. **82j:06008**
- Maurer, Stephen B. (with Rabinovitch, Issie; Trotter, William T., Jr.) Partially ordered sets with equal rank and dimension. **82b:06004**
(with Rabinovitch, Issie; Trotter, William T., Jr.) Large minimal realizers of a partial order. II. **82a:06002**
- Monjardet, Bernard Metrics on partially ordered sets—a survey. **82f:06004**
- Pouzet, Maurice Sur les chaînes d'un ensemble partiellement bien ordonné. **82a:06003**
See also Duffus, Dwight; et al., **82j:06003**
- Pretzel, Oliver A construction for partially ordered sets. **82c:06007**
- Rabinovitch, Issie See Maurer, Stephen B.; et al., **82a:06002** and **82b:06004**
- Rachineik, Jifi Translations des ensembles ordonnés. (Russian summary) [Translations of ordered sets] **82m:06004**
- Rao, G. C. See Krishna Murty, M., **82m:06002**
- Rival, Ivan The problem of fixed points in ordered sets. **82j:06002**
(with Wille, Rudolf) The smallest order variety containing all chains. **82j:06009**
See also Duffus, Dwight; et al., **82c:06005**; **82f:06001** and **82j:06003**
- Saks, Michael E. A short proof of the existence of k -saturated partitions of partially ordered sets. **82c:06008**
- Sands, Bill Counting antichains in finite partially ordered sets. **82j:06003**
- Schmidt, Diana The relation between the height of a well-founded partial ordering and the order types of its chains and antichains. **82i:06002**
- Šešelja, B. See Ušan, Janez; et al., **82j:06010**
- Shearer, James B. See Kleitman, Daniel J., **82f:06003**
- Simonovits, M. See Duffus, Dwight; et al., **82c:06005**
- Tovey, Craig A. See West, Douglas B., **82b:06002**
- Trotter, William T., Jr. Stacks and splits of partially ordered sets. **82i:06003**
See also Maurer, Stephen B.; et al., **82a:06002** and **82b:06004**
- Ušan, Janez (with Šešelja, B.; Vojvodić, Gradimir D.) Generalized ordering and partitions. **82j:06010**
- Vojvodić, Gradimir D. See Ušan, Janez; et al., **82j:06010**
- West, Douglas B. (with Tovey, Craig A.) Semiantichains and unichain coverings in direct products of partial orders. **82b:06002**
- Wille, Rudolf Cancellation and refinement results for function lattices. **82j:06004**
See also Rival, Ivan, **82j:06009**
- Xu, Li Zhi An extension of the Möbius-Rota inversion theory with applications. (Chinese. English summary) **82c:06003**
- secondary classifications:
- Aigner, Martin Producing posets. **(82j:68041)**
- Bandelt, Hans-J. Isomorphisms between semigroups of isotone maps. **(82g:20102)**
- Barthélemy, Jean-Pierre About the shortest chain between two vertices in a quasistrongly connected digraph with a potential. **(82f:05043)**
- Bartusch, M. An algorithm for generating all maximal independent subsets of posets. (German summary) **(82j:68054)**
- Bernholz, Peter A general social dilemma: profitable exchange and intransitive group preferences. **(82c:90008)**
- Bloom, Stephen L. (with Tindell, Ralph) Compatible orderings on the metric theory of trees. **(82f:68063)**
- Bresson, D. See Monjardet, Bernard, **(82c:06014)**
- Cerasoli, Mauro The Möbius-Rota function as an enumeration method. (Italian. English summary) **(82c:05006)**
- Chaudhuri, Rita (with Mukherjee, A.) Idempotent Boolean matrices. **(82g:04001)**
- Courcelle, Bruno (with Raoult, Jean-Claude) Completions of ordered magmas. **(82b:68041)**
- Eisenbud, David Introduction to algebras with straightening laws. **(82i:14030)**
- Erné, Marcel Topologies on products of partially ordered sets. I. Interval topologies. **(82m:54028a)**
Topologies on products of partially ordered sets. II. Ideal topologies. **(82m:54028b)**
Topologies on products of partially ordered sets. III. Order convergence and order topology. **(82m:54028c)**
On the cardinalities of finite topologies and the number of antichains in partially ordered sets. **(82f:05005)**
- Faigle, Ulrich The greedy algorithm for partially ordered sets. **(82b:65051)**
- Farmer, Frank D. Cellular homology for posets. **(82k:18013)**
- Fishburn, Peter C. Subjective expected utility: a review of normative theories. **(82h:90016)**
- Gavalec, Martin (with Vojtáš, Peter) Remarks to a modification of Ramsey-type theorems. **(82c:05053)**
- Graham, Ronald L. (with Yao, Andrew Chi Chih; Yao, F. Frances) Some monotonicity properties of partial orders. **(82c:60022)**
- Griggs, Jerrold R. (with Sturtevant, Dean; Saks, Michael E.) On chains and Sperner k -families in ranked posets. II. **(82c:05004)**
- Gronau, Hans-Dietrich O. F. On maximal antichains consisting of sets and their complements. **(82b:05082)**
- Harper, L. H. The global theory of flows in networks. **(82j:05063)**
- Hildenbrand, Werner On the uniqueness of mean demand for dispersed families of preferences. **(82j:90004)**
- Höft, Hartmut Antisymmetry and lexicographic product relations. **(82m:04001)**
- Huet, Gérard Confluent reductions: abstract properties and applications to term rewriting systems. **(82a:68090)**
- Kierstead, Henry A. An effective version of Dilworth's theorem. **(82c:03069)**
- Kovalev, M. M. The partial-order method. (Russian. English summary) **(82b:05050)**
- Lehmann, Daniel J. On the algebra of order. **(82c:68042)**
(with Smyth, Michael B.) Algebraic specification of data types: a synthetic approach. **(82j:68013)**
- Manaster, Alfred B. (with Rummel, Jeffrey B.) Some decision problems for subtheories of two-dimensional partial orderings. **(82b:03011)**
- Maurer, Stephen B. (with Rabinovitch, Issie; Trotter, William T., Jr.) A generalization of Turán's theorem to directed graphs. **(82c:05061)**
- Milliken, Keith R. A partition theorem for the infinite subtrees of a tree. **(82g:04003)**
- Milner, E. C. (with Sauer, Norbert) Remarks on the cofinality of a partially ordered set, and a generalization of König's lemma. **(82g:04004)**
(with Sauer, Norbert) On chains and antichains in well-founded partially ordered sets. **(82j:04002)**
- Monjardet, Bernard (with Bresson, D.) Quasi-ordres, intervalles, etc.: une bibliographie. **(82c:06014)**
- Mosesjan, K. M. Properties of some orientations of graphs. (Russian. Armenian summary) **(82j:05066)**
- Mukherjee, A. See Chaudhuri, Rita, **(82g:04001)**
- Nelson, Evelyn On exponentiating exponentiation. **(82c:18010)**
- Noltemeier, Hartmut On a generalization of heaps. **(82h:68083)**
- Rabinovitch, Issie See Maurer, Stephen B.; et al., **(82c:05061)**
- Raoult, Jean-Claude See Courcelle, Bruno, **(82b:68041)**
- Rummel, Jeffrey B. See Manaster, Alfred B., **(82b:03011)**
- Rudin, Mary Ellen Directed sets which converge. **(82f:54006)**
- Saks, Michael E. See Griggs, Jerrold R.; et al., **(82c:05004)**
- Sauer, Norbert See Milner, E. C., **(82g:04004)** and **(82j:04002)**
- Schmerl, James Henry Decidability and finite axiomatizability of theories of N_0 -categorical partially ordered sets. **(82h:03024)**
- Seese, Detlef G. Partitions for trees. **(82b:05056)**
- Shepp, L. A. The FK_g inequality and some monotonicity properties of partial orders. **(82k:60013)**
- Sidorenko, A. F. The number of admissible linear orderings of a partially ordered set as a function of its incomparability graph. (Russian) **(82c:05116)**
- Smyth, Michael B. See Lehmann, Daniel J., **(82j:68013)**
- Stanley, Richard P. Weyl groups, the hard Lefschetz theorem, and the Sperner property. **(82j:20083)**
- Sturtevant, Dean See Griggs, Jerrold R.; et al., **(82c:05004)**
- Tindell, Ralph See Bloom, Stephen L., **(82f:68063)**
- Travkin, S. I. Distribution of the number of maximal objects in partially ordered systems of comparison. (Russian) **(82a:90020)**
- Trotter, William T., Jr. See Maurer, Stephen B.; et al., **(82c:05061)**
- Vo, Kiem Phong The Schensted correspondence and lexicographic matchings on multisubset lattices. **(82i:05006)**
- Vojtáš, Peter See Gavalec, Martin, **(82c:05053)**
- Voss, Edward R. On the isomorphism problem for incidence rings. **(82f:16020)**
- Yao, Andrew Chi Chih See Graham, Ronald L.; et al., **(82c:60022)**
- Yao, F. Frances See Graham, Ronald L.; et al., **(82c:60022)**
- Bibliography:
Semiordees See Monjardet, Bernard; et al., **(82c:06014)**

06A12 Semilattices [See also 20M10.]

- Blyth, T. S. Ideals and filters of pseudocomplemented semilattices. **82g:06005**
- Duda, J. Quotient algebras of implicative semilattices. (Serbo-Croatian summary) **82c:06009**
- Evans, Elliott Slim trees. **82i:06004**
- Fábrega, Jifi (with Sturm, Teo) Embedding of semilattices into distributive lattices. **82j:06011**
- Flament, Claude See Polat, Norbert, **82a:06007**
- Grandis, Marco Distributive unions in semilattices and in inverse symmetrizations. (Italian summary) **82h:06003**
- Grošek, Otakar Entropy on algebraic lattices. (Russian. English summary) **82c:06004**

- Grossman, P. A. Local polynomial functions on semilattices. 82k:06002
 Jayaram, C. Complemented semilattices. 82a:06004
 0-ideals in semilattices. 82a:06005
 Köhler, Peter Brouwerian semilattices. 82i:06005
 Lajos, Sándor On semilattices of right groups. (See 82f:20007)
 Pawar, Y. S. (with Thakare, N. K.) On prime semilattices. 82a:06006
 Polat, Norbert (with Flament, Claude) Applications galoisiennes proches d'une application entre treillis. 82a:06007
 Romanowska, Anna B. (with Smith, Jonathan D. H.) Bisemilattices of subsemilattices. 82h:06004
 Sankappanavar, H. P. On pseudocomplemented semilattices with Stone congruence lattices. (Russian summary) 82c:06010
 On the congruence lattice of a finite pseudocomplemented semilattice. 82h:06005
 Smith, Jonathan D. H. See Romanowska, Anna B., 82h:06004
 Sturm, Teo See Fabera, Jih, 82j:06011
 Thakare, N. K. See Pawar, Y. S., 82a:06006

secondary classifications:

- Baclawski, Kenneth The Möbius algebra as a Grothendieck ring. (82k:18002)
 Bandyopadhyay, S. P. (with Chandra, Subha) Valuation and Archimedean classes in U -algebras. (82g:08009)
 Barnabei, Mariela (with Brini, Andrea) Some properties of characteristic polynomials and applications to T -lattices. (82h:05008)
 Brini, Andrea See Barnabei, Mariela, (82h:05008)
 Chandra, Subha See Bandyopadhyay, S. P., (82g:08009)
 Deger, A. N. Some results on upper semilattices and m -degrees. (Russian) (82c:03065)
 Estabrook, G. F. (with Morris, F. R.) When is one estimate of evolutionary relationships a refinement of another? (82g:92005)
 Grossman, P. A. (with Lausch, H.) Interpolation on semilattices. (82c:08003)
 Kalman, J. A. The join of the varieties of implication algebras and semilattices. (82a:06014)
 Lausch, H. See Grossman, P. A., (82c:08003)
 Macburn, J. D. Three counterexamples concerning ω -chain completeness and fixed point properties. (82j:06008)
 Morris, F. R. See Estabrook, G. F., (82g:92005)
 Meakin, John (with Pastijn, Francis) The structure of pseudosemilattices. (82k:20100)
 Mills, Janet E. Describing uniform bands in terms of uniform semilattices. (82a:20073)
 Pastijn, Francis Uniform lattices. (82c:06019)
 Rectangular bands of inverse semigroups. (Dutch) (82c:20073)
 See also Meakin, John, (82k:20100)
 Putcha, Mohan S. Rings which are semilattices of Archimedean semigroups. (82j:16031)
 Rachunek, Jiří Reflexive and antisymmetric relations and their systems. (82j:08002)
 Tanana, B. P. Projections of compact semilattices. (Russian) (82g:06009)
 Ursini, Aldo On some Stone spaces. (Italian summary) (82d:54041)

06A15 Galois correspondences, closure operators

- Dalik, Josef Lattices of generating systems. 82c:06011

secondary classifications:

- Shmueli, Zahava The tensor product of distributive lattices. (82h:06009)

06A23 Complete lattices, completions

- Bandelt, Hans-J. Plonka sum of complete lattices. 82m:06005
 Björner, Anders Order-reversing maps and unique fixed points in complete lattices. 82i:06006
 Cousot, Patrick (with Cousot, Radhia) Constructive versions of Tarski's fixed point theorems. 82d:06004
 Cousot, Radhia See Cousot, Patrick, 82d:06004
 Dacić, Rade M. Conjugately factorable isotope self-mappings of complete lattices. 82f:06005
 Fixed points of monotone multifunctions in partially ordered sets. 82g:06006
 Johnson, Johnny A. (with Perez, Dottie) Two multiplicative lattice examples. 82i:06007
 Lowig, H. F. J. On the completion of relatively complemented distributive lattices. 82k:06003
 Perez, Dottie See Johnson, Johnny A., 82i:06007

secondary classifications:

- Ball, Richard N. Cut completions of lattice-ordered groups by Cauchy constructions. (82g:06028)
 Dalik, Josef Lattices of generating systems. (82c:06011)
 Duffus, Dwight (with Pouzet, Maurice; Rival, Ivan) Complete ordered sets with no infinite antichains. (82j:06003)
 Kent, Darrell C. Completions of I -Cauchy groups. (82i:06023)
 Mukherjee, M. K. A note on completeness of bounded lattices postulated in some axiomatics of the mathematical foundations of quantum theory. (82k:81008)
 Pouzet, Maurice See Duffus, Dwight; et al., (82j:06003)
 Rival, Ivan See Duffus, Dwight; et al., (82j:06003)
 Šik, František Complements of congruences in an Ω -group. (Czech summary) (82g:08004)

06A99 None of the above, but in this section

- Cogis, O. À propos des quasi-ordres—note. (English summary) 82f:06006
 Erné, Marcel Isomorphismen und Identifikationen in der Ordnungstheorie. 82g:06007
 Fried, E. (with Grätzer, G.; Quackenbush, R. W.) The equational class generated by weakly associative lattices with the unique bound property. 82a:06008

- Grätzer, G. See Fried, E.; et al., 82a:06008
 Quackenbush, R. W. See Fried, E.; et al., 82a:06008

secondary classifications:

- Fishburn, Peter C. Maximum semiorders in interval orders. (82j:05001)
 Huber, Oswald Die Erklärung der Non-Transitivität von Pseudo-Ordnungsrelationen. (82h:92059)
 Kula, Mieczysław Finite sets of quasi-orderings. (Polish summary) (82f:10022)
 Meseguer, José A Birkhoff-like theorem for algebraic classes of interpretations of program schemes. (82m:68026)
 Rabinović, V. L. (with Rahmetžanov, S. R.) Compatibility and independence of properties of binary relations. (Russian) (82k:04002)
 Rahmetžanov, S. R. See Rabinović, V. L., (82k:04002)
 Romanowska, Anna B. Free bisemilattices with one distributive law. (82d:06011)
 Subdirectly irreducible \ast -distributive bisemilattices. I. (82d:06012)
 Métriques et relations ★ Métriques et relations. (82c:92060)

06Bxx Lattices [See also 03G10.]

06B05 Structure theory

- Adams, M. E. (with Sichler, J.) Lattices with unique complementation. 82f:06007
 Baclawski, Kenneth (with Björner, Anders) Fixed points and complements in finite lattices. 82f:06008
 Björner, Anders See Baclawski, Kenneth, 82f:06008
 Chajda, Ivan Two characterizations of locally order-polynomially complete lattices. 82k:06004
 Fried, E. Interpolation in weakly associative lattices. 82j:06012
 Grätzer, G. (with Huhn, András P.) A note on finitely presented lattices. 82h:06006
 Huhn, András P. See Grätzer, G., 82h:06006
 Ovchinnikov, S. V. Convexity in subsets of lattices. 82j:06013
 Platt, C. R. Finite transferable lattices are sharply transferable. 82c:06012
 Rival, Ivan (with Ruckelshausen, W.; Sands, Bill) On the ubiquity of herringbones in finitely generated lattices. 82j:06014
 Ruckelshausen, W. See Rival, Ivan; et al., 82j:06014
 Sands, Bill See Rival, Ivan; et al., 82j:06014
 Sichler, J. See Adams, M. E., 82f:06007
 Stern, Manfred A note on p -compatible AC-lattices. 82i:06008

06B10 Ideals, congruence relations

- Banaschewski, B. (with Bruns, G.) A proof that $\mathfrak{Z}(L)$ belongs to $HSP(L)$. 82g:06008
 Bruns, G. See Banaschewski, B., 82g:06008
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- Adams, M. E. (with Sichler, J.) Cover set lattices. (82g:06010)
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Buhăescu, T. T. On convex functions from a fuzz X to a fuzz Y . (82g:03090)

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Cornish, William H. Boolean skew algebras. (82d:08005)

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Kaiser, Klaus Lattices acting on universal classes. (82j:03080)

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Jaglom, I. M. ★Булева структура и ее модели. (Russian) [Boolean structure and its models] 82g:06023

06E05 Structure theory

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Baumgartner, J. E. (with Komjáth, P.) Boolean algebras in which every chain and antichain is countable. 82j:06023

Bonnet, R. Very strongly rigid Boolean algebras, continuum discrete set condition, countable antichain condition. I. 82c:06025

van Douwen, Eric K. (with Monk, J. Donald; Rubin, Matatyahu) Some questions about Boolean algebras. 82a:06024

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Rubin, Matatyahu On the reconstruction of Boolean algebras from their automorphism groups. 82c:06026

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secondary classifications:

Brown, Frank Markham (with Rudeanu, Sergiu) Consequences, consistency, and independence in Boolean algebras. (82g:03106)

van Douwen, Eric K. A consistent very small Boolean algebra with countable automorphism group. (82g:03088)

Ermolaeva, N. M. (with Mučnik, A. A.) Functionally closed 4-valued extensions of Boolean algebra and corresponding logics. (Russian) (82k:03025)

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Rudeanu, Sergiu See Brown, Frank Markham, (82g:03106)

Sankappanavar, H. P. On pseudocomplemented semilattices with Stone congruence

lattices. (Russian summary) (82c:06010)

Sturm, Teo Universal coretracts in some categories of chains and Boolean algebras. (82d:06002)

06E10 Chain conditions, complete algebras

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Koppelberg, Sabine Cofinalities of complete Boolean algebras. 82c:06027

secondary-classifications:

Akmalov, N. A. Completeness of topological groups of the class $S(\nabla, bE)$. (Russian) (82j:22001)

Kalinin, V. V. Invariant measures on Boolean algebras. (Russian) (82g:28011)

Miller, Arnold W. On generating the category algebra and the Baire order problem. (Russian summary) (82k:04005)

06E15 Topological representation

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Dukarm, J. Weakly monadic Boolean extension functors. (82e:18010)

Johanson, Arnold A. Topology without points. (82j:54009)

Kannan, V. (with Rajagopalan, M.) Constructions and applications of rigid spaces. III. (82e:54045c)

Kasimov, V. A. See Bunajator, M. R., (82d:18019)

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06E20 Boolean rings [See also 16A30, 16A32.]

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Swaminathan, V. On Foster's Boolean-like rings. 82h:06014

secondary classifications:

Abian, Alexander Molecules of a partially ordered set. (82c:06002)

Grzegorek, Edward On saturated sets of Boolean rings and Ulam's problem on sets of measures. (82k:04006)

Murti, G. Suryanarayana See Swamy, U. Maddana, (82g:20105)

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06E99 None of the above, but in this section

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- Lawrence, John W. Boolean powers of groups. **82i:06023**
 Meskhi, Slava. See Grigolia, R. S., **82i:06021**
 Šik, František. A characterization of polarities whose lattice of polars is Boolean. **82e:06013**
 Tăndăreanu, Nicolae. On generalized Boolean functions. I. **82i:06019**
 Wolsiewicz, Bogusław. The Boolean algebra of objectives. **82i:06024**

secondary classifications:

- Abian, Alexander. A proof of Rasiowa-Sikorski theorem via complete sequences. **(82i:03056)**
 Agibalov, G. P. (with Evtushenko, N. V.) Realization of systems of Boolean functions by cascaded configurations of identical tunable elements. **(82i:94035)**
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 Comerford, Jonell Duda. Affine and general linear equivalences of Boolean functions. **(82d:94069)**
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06Fxx Ordered structures [See also 22A26, 54F05.]**06F05 Ordered semigroups [See also 20Mxx.]**

- Behrens, Ernst-August. Partially ordered semigroups of normal ideals. (See **82i:20120**)
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secondary classifications:

- Arsove, Maynard (with Leutwiler, Heinz) Quasi-units in mixed lattice structures. **(82a:31018)**
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 Jiménez Guerra, Pedro. Generalizations of the Hahn-Banach theorem for preordered semimodules. (Spanish) **(82c:46010)**
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 Merlier, Thérèse. Quelques propriétés des idéaux d'un demi-groupe. **(82g:20096)**
 Namboripad, K. S. Subramanian. The natural partial order on a regular semigroup. **(82g:20092)**
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- Johnson, Johnny A. Regular and Macaulay lattices. **82g:06027**

secondary classifications:

- Perez, Dottie. Union conditions in r -lattices. **(82a:06012)**

06F15 Ordered groups [See also 20F60.]

- Ball, Richard N. Topological lattice-ordered groups. **82h:06021**
 Cut completions of lattice-ordered groups by Cauchy constructions. **82g:06028**
 Bardwell, Maureen A. Lattice-ordered groups of order automorphisms of partially ordered sets. **82i:06025**
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 Davis, Gary. Permutation representation of groups with Boolean orthogonalities. **82h:06023**
 (with McCleary, Stephen H.) The lateral completion of a completely distributive lattice-ordered group (revisited). **82k:06021**
 Glass, A. M. W. (with Pierce, Keith R.) Equations and inequations in lattice-ordered groups. **82c:06030**
 (with Pierce, Keith R.) Existentially complete lattice-ordered groups. **82h:06016**
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 Kent, Darrell C. Completions of I -Cauchy groups. **82i:06023**
 Kleimenov, V. F. See Bludov, V. V., **82k:06020**
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 Martínez, Jorge. Lexicographic centers of a lattice-ordered group. **82h:06017**
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 Protasov, I. V. (with Sidortuk, A. D.) A local theorem for ordered topological groups. (Russian. English summary) **82i:06024**
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 Bardwell, Maureen A. A class of partially ordered sets whose groups of order automorphisms are lattice-ordered. **(82c:06003)**
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06F20 Ordered abelian groups, ordered linear spaces [See also 46A40.]

Anderson, Marlow (with Conrad, Paul) Epicomplete *l*-groups. 82d:06017

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secondary classifications:

Bernau, S. J. Orthomorphisms of Archimedean vector lattices. (82b:47043)

Effros, Edward G. (with Shen, Chao Liang) Dimension groups and finite difference equations. (82c:46088)

Feldman, W. A. (with Porter, J. F.) The relative uniform convergence structure. (82b:46008)

Glass, A. M. W. (with Pierce, Keith R.) Equations and inequations in lattice-ordered groups. (82c:06030)

(with Gurevich, Yuri; Holland, W. Charles; Shelah, Saharon) Rigid homogeneous chains. (82c:06001)

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Henriksen, Melvin A summary of results on order-Cauchy completions of rings and vector lattices of continuous functions. (82f:54024)

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Lacava, Francesco Observations on the theory of lattice-ordered abelian groups. (Italian. English summary) (82a:03032)

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06F25 Ordered rings, algebras, modules {For ordered fields, see 10M15, 12J15; see also 13J25, 16A86.}

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Gusev, A. I. (with Smirnova, N. A.) Some properties of ordered rings. (Russian) 82g:06029

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Mahdavi-Hezavehi, M. Totally ordered rings and fields. 82e:06017

Radnev, Petko (with Baljučev, Paskal) Abian's order in *p*-rings. (Bulgarian. Russian and English summaries) 82f:06028

Schwartz, Niels Archimedean lattice-ordered fields that are algebraic over their *o*-subfields. 82e:06018

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Steinberg, Stuart A. Lattice-ordered modules of quotients. 82e:06019

Subba Rao, B. V. Realization of lattice ordered autometrized algebras. 82f:06029

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Weimer, Richard C. A note on ordering the complex numbers. 82g:06030

Wilson, Robert Ross Anti-*f*-rings. 82e:06020

secondary classifications:

Ajupov, Š. A. On the theory of partially ordered Jordan algebras. (Russian) (82e:17019a)

A spectral theorem for *OJ*-algebras. (Russian) (82e:17019b)

Aron, Eleanor R. (with Hager, Anthony W.) Convex vector lattices and *l*-algebras. (82c:54010)

Bhandari, M. C. (with Radhakrishna, A.) On ordered Jordan algebras. (82i:17027)

Conrad, Paul The structure of an *l*-group that is determined by its minimal prime subgroups. (82b:06015)

Donskoi, D. E. The structure of maximal ideals in ordered rings. (Russian) (82i:46009)

Grané Manlleu, José On the isometries of lattice-ordered groups and rings. (Spanish) (82h:06027)

Topological properties of the groups of isometries of a lattice-ordered group. (Spanish. English summary) (82m:06018)

Gusev, A. I. The structure of ideals in ordered rings. (Russian) (82i:46010)

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Radhakrishna, A. See Bhandari, M. C., (82i:17027)

Teneva, S. G. Directed orders in Lie algebras. (Bulgarian. Russian and English summaries) (82h:17012)

Zelevnikov, John The natural partial order on semirings. (82e:06015)

Zimmermann, Karel Convexity in semimodules. (Czech summary) (82k:52008)

06F30 Topological lattices, order topologies [See also 06B30, 54F05, 54H12.]

Fontana, Marco Quelques nouveaux résultats sur une classe d'espaces spectraux. (Italian summary) 82j:06024

secondary classifications:

Albrecht, R. F. Roundings and approximations in ordered sets. (82b:65032)

Ball, Richard N. Topological lattice-ordered groups. (82h:06021)

Bennett, Harold R. *GO*-spaces with *θθ*-bases. (82j:54062)

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Feldman, W. A. (with Porter, J. F.) The order topology for function lattices and realcompactness. (82h:46065)

Fox, Ralph Pretransitivity and products of suborderable spaces. (82j:54010)

Gierz, Gerhard (with Lawson, Jimmie D.) Generalized continuous and hypercontinuous lattices. (82h:54069)

Grané Manlleu, José Topological properties of the groups of isometries of a lattice-ordered group. (Spanish. English summary) (82m:06018)

Herlich, Horst Orderability of connected graphs and nearness spaces. (82j:54064)

Kolibrar, Milan Intrinsic topologies on ordered sets. (Slovak and Russian summaries) (82h:54051)

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Protasov, I. V. (with Sidorčuk, A. D.) A local theorem for ordered topological groups. (Russian. English summary) (82i:06024)

Purisch, Steve Orderability and suborderability results for totally disconnected spaces. (82j:54066)

(with Wattel, Evert) Nonorderability of suborderable spaces with many pseudogaps. (82j:54067)

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Sondermann, Dieter Utility representations for partial orders. (82k:90029)

Todorčević, Stevo B. Cardinal functions on linearly ordered topological spaces. (82j:54069)

Treybig, L. B. "Extending" maps of arcs to maps of ordered continua. (82j:54076)

Turinici, Mihai Maximal elements in a class of order complete metric spaces. (82c:54027)

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06F99 None of the above, but in this section

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Šnarda, Bohumil Ideal systems of intersection and product type. 82b:06021

Swamy, B. L. N. See Naik, N.; et al., 82a:06033

Zybina, L. D. Groupoids with ordering in which groupoid ideals coincide with order ideals. (Russian) 82h:06022

secondary classifications:

Ajupov, Š. A. (with Usmanov, Š. M.) *R*-topologies in *OJ*-algebras. (Russian) (82j:17021)

Courcelle, Bruno (with Raoult, Jean-Claude) Completions of ordered magmas. (82b:68041)

Hoffmann, Rudolf-E. Projective sober spaces. (82b:54017)

Lehmann, Daniel J. On the algebra of order. (82b:68042)

Radnev, Petko Loops which admit only one linear order. (Bulgarian. Russian and English summaries) (82f:20102)

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08-XX GENERAL MATHEMATICAL SYSTEMS

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Cohn, P. M. ★Universal algebra. 82j:08001

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08-02 Advanced exposition (research surveys, monographs, etc.)

08-03 Historical (must also be assigned at least one classification number from Section 01)

08-04 Explicit machine computation and programs (not the theory of computation or programming)

08-06 Proceedings, conferences, etc.

(Durakov, B. K.) See All-Union Conference: Algebra, 82h:20001b

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All-Union Conference:

Algebra ★XV Всесоюзная Алгебраическая Конференция. Часть Вторая. (Russian) [Fifteenth All-Union Algebra Conference. Part II] 82h:20001b

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08Axx Universal algebra [See also 03C05.]

08A02 Relational systems, laws of composition

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- Florescu, Liviu Structures syntopogènes probabilistes. **82i:08001**
- Froda-Schechter, M. (with Mitrea, A.; Mitrea-Dolea, P.) k -relations de tolérance. **82f:08001**
- Istrătescu, I. I. On generalized complete probabilistic metric spaces. **82h:08001**
- Länger, Helmut A generalization of a theorem of Skala. **82g:08001**
- Lau, Dietlinde Kongruenzen auf Postischen Algebren von Funktionen über einer Familie endlicher Mengen. **82h:08002**
- Mitrea, A. See Froda-Schechter, M.; et al., **82f:08001**
- Mitrea-Dolea, P. See Froda-Schechter, M.; et al., **82f:08001**
- Rachunek, Jiří Reflexive and antisymmetric relations and their systems. **82j:08002**
- Sultanbekov, F. F. A class of triangle functions in an axiomatic system of random metric spaces. (Russian) **82j:08003**

secondary classifications:

- Alsina, Claudi See Trillas Ruiz, Enrique, (82h:51026)
- Bernstein, Philip A. (with Chiu, Dah Ming W.) Using semijoins to solve relational queries. **(82k:68019)**
- Bocjan, Gh. (with Rovenja, E.) On some fixed point theorems in probabilistic metric spaces. **(82k:54046)**
- Chiu, Dah Ming W. See Bernstein, Philip A., (82k:68019)
- Constantin, Gh. (with Radu, Viorel) On probabilistic δ -continuity and proximate fixed points for multivalued functions in PM-spaces. **(82k:54067)**
- Dumitrescu, Constantin Un produit scalaire probabiliste. **(82m:46021)**
- Gorskov, P. V. Relations in data structure algebras. II. **(82h:68021)**
- Hadžić, Olga Fixed point theorems for multivalued mappings in probabilistic metric spaces. **(82g:54068)**
- Kalmanović, A. M. Semiheaps of pairs of homomorphisms of Berge graphs. (Russian) **(82c:05053)**
- Madet, Roger Embedding modular lattices into relation algebras. **(82d:06007)**
- Matvečuk, M. S. The law of multiplication of random norms. (Russian) **(82g:46089)**
- Rabinović, V. L. (with Rahmetzanov, S. R.) Compatibility and independence of properties of binary relations. (Russian) **(82k:04002)**
- Radu, Viorel See Constantin, Gh., (82k:54067)
- Rahmetzanov, S. R. See Rabinović, V. L., (82k:04002)
- Rovenja, E. See Bocjan, Gh., (82m:54046)
- Sanderson, John G. \star A relational theory of computing. **(82m:68004)**
- Schweizer, B. (with Sklar, A.) How to derive all L_p -metrics from a single probabilistic metric. **(82d:46050)**
- Sklar, A. See Schweizer, B., (82d:46050)
- Trillas Ruiz, Enrique (with Alsina, Claudi) \star Introducción a los espacios métricos generalizados. (Spanish) [Introduction to generalized metric spaces] **(82h:51026)**
- Vasenko, V. P. Decomposition and separation of n -ary relations. (Russian) **(82a:04002)**

08A05 Structure theory

- Andréka, Hajnal (with Németi, István) Does $SP\ K \supseteq PS\ K$ imply axiom of choice? **82a:08002**
- Benda, Miroslav Modeloids. I. **82g:08002**
- Burgin, M. S. Representations of linear Ω -algebras in the form of products. (Russian) **82d:08001**
- Caicedo Ferrer, Xavier The subdirect decomposition theorem for classes of structures closed under direct limits. **82c:08001**
- Németi, István See Andréka, Hajnal, **82a:08002**
- Trohimenko, V. S. Some relativized P -algebras of multiplace functions. (Russian) **82c:08001**

secondary classifications:

- Engeler, Erwin Generalized Galois theory and its application to complexity. **(82j:68018)**
- Ermolaeva, N. M. (with Mučnik, A. A.) Functionally closed 4-valued extensions of Boolean algebra and corresponding logics. (Russian) **(82k:03025)**
- Ježek, Jaroslav (with Kepka, Tomáš) Semigroup representations of medial groupoids. **(82k:20109)**
- Kepka, Tomáš See Ježek, Jaroslav, (82k:20109)
- Kisielewicz, A. A remark on diagonal algebras. **(82h:08004)**
- Kosmák, Ladislav On equivalence relations. (Slovak and Russian summaries) **(82i:04001)**
- Krasner, Marc Abstract Galois theory. **(82j:03041)**
- Mučnik, A. A. See Ermolaeva, N. M., (82k:03025)
- Niederle, Josef (with Polák, Libor) The category of nonindexed algebras and weak homomorphisms. **(82d:18006)**
- Polák, Libor See Niederle, Josef, (82d:18006)

08A30 Subalgebras, congruence relations

- Andréka, Hajnal (with Németi, István) Similarity types, pseudosimple algebras, and congruence representations of chains. **82m:08002**
- Batbedat, André Sur les sous-objets en algèbre générale. **82k:08001**
- Burris, Stanley (with Lawrence, John W.) Two examples concerning the definability of the disjointness property of principal congruences. **82f:08002**
- Chajda, Ivan A Mal'cev characterization of tolerance regularity. **82h:08001**
- Polynomially determined tolerances. **82d:08002**
- Cornish, William H. (with Stewart, P. N.) Direct and subdirect decompositions of universal algebras with a Boolean orthogonality. **82m:08003**

- Heidema, J. (with Malan, S. W.) Congruences on relational structures. (See **82i:16002**)
- Kiss, Emil W. Each Hamiltonian variety has the congruence extension property. **82h:08002**
- Kurinnii, G. Č. Ω -algebras with a Stone lattice of ideals. (Russian) **82d:08003**
- Lawrence, John W. See Burris, Stanley, **82f:08002**
- Malan, S. W. See Heidema, J., (See **82i:16002**)
- Németi, István See Andréka, Hajnal, **82m:08002**
- Niederle, Josef A note on tolerance lattices of finite chains. (Czech summary) **82f:08003**
- Pálfi, Péter Pál (with Pudlák, Pavel) Congruence lattices of finite algebras and intervals in subgroup lattices of finite groups. **82g:08003**
- Plonka, Jerzy On lattices of congruences of relational systems and universal algebras. **82k:08002**
- Pudlák, Pavel See Pálfi, Péter Pál, **82g:08003**
- Šik, František Complements of congruences in an Ω -group. (Czech summary) **82g:08004**
- Joins of congruences in Ω -groups. (Czech summary) **82k:08003**
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- Andréka, Hajnal (with Németi, István) Does $SP\ K \supseteq PS\ K$ imply axiom of choice? **(82a:08002)**
- Bartol, Wiktor Subalgebra lattices of mono-unary algebras. **(82f:08006)**
- Beazer, R. On congruence lattices of some p -algebras and double p -algebras. **(82m:06010)**
- Butson, A. T. See Leeson, J. J., (82h:08008)
- Chajda, Ivan Congruence factorizations on distributive lattices. (Russian summary) **(82c:06015)**
- Choe, Tae Ho Congruence weak regularity and unary algebraic polynomials. **(82g:08006)**
- Leeson, J. J. (with Butson, A. T.) On the general theory of (m, n) rings. **(82h:08008)**
- Németi, István See Andréka, Hajnal, (82a:08002)
- Pinus, A. G. The spectrum of rigid systems of Horn classes. (Russian) **(82k:03044)**

08A35 Automorphisms, endomorphisms

- Bandelt, Hans-J. Endomorphism semigroups of median algebras. **82d:08004**
- Chaiyakul, C. See Tamthai, M., **82h:08004**
- Chavina, Jan On connected unars with regular endomorphism monoids. **82a:08003**
- Demetrovics, János (with Hannák, L.; Rónyai, L.) Prime-element algebras with transitive automorphism groups. **82h:08003**
- Hannák, L. See Demetrovics, János; et al., **82h:08003**
- Lao, Li Bo A problem concerning the automorphism group of an abstract algebra. (Chinese) **82g:08005**
- Marčenko, S. S. On homogeneous algebras. (Russian) **82h:08003**
- Nieminen, Juhani Translations of ternary algebras. **82c:08002**
- Rónyai, L. See Demetrovics, János; et al., **82h:08003**
- Tamthai, M. (with Chaiyakul, C.) The endomorphism semigroup of algebras with reflexive elements. **82h:08004**
- Varecza, L. A Galois correspondence for universal algebras. **82h:08005**
- Equivalence relations defined by automorphism groups. **82c:08002**

secondary classifications:

- Birkenhead, R. Endomorphism monoids containing all permutations. **(82k:20104)**
- Pinus, A. G. The spectrum of rigid systems of Horn classes. (Russian) **(82k:03044)**
- Wesolowski, Tadeusz On automorphisms of idempotent reducts of abelian groups with a prime exponent. (Polish. English summary) **(82a:20060)**

08A40 Operations, polynomials, primal algebras

- Choe, Tae Ho Congruence weak regularity and unary algebraic polynomials. **82g:08006**
- Clark, David M. (with Krauss, Peter H.) Plain para primal algebras. **82g:08007**
- Cornish, William H. Boolean skew algebras. **82d:08005**
- Csikány, B. Homogeneous algebras are functionally complete. **82a:08004**
- Demetrovics, János (with Hannák, L.) On finite algebras with one operation. (Russian) **82i:08002**
- Grossman, P. A. (with Lausch, H.) Interpolation on semilattices. **82c:08003**
- Hannák, L. See Demetrovics, János, **82i:08002**
- Kisielewicz, A. A remark on diagonal algebras. **82h:08004**
- Krauss, Peter H. See Clark, David M., **82g:08007**
- Lausch, H. See Grossman, P. A., **82c:08003**
- Lee, Sin Min On the sequences representable by idempotent algebras. **82c:08003**
- McKenzie, R. (with Quackenbush, R. W.) The spectrum of a lattice-primal algebra. **82j:08004**
- Quackenbush, R. W. See McKenzie, R., **82j:08004**
- Szendrei, Mária B. On closed sets of term functions on bands. **82g:08008**
- Taylor, Walter Some universal sets of terms. **82h:08005**

secondary classifications:

- Fried, E. Interpolation in weakly associative lattices. **(82j:06012)**
- Grossman, P. A. Local polynomial functions on semilattices. **(82k:06002)**
- Lowesmith, Barbara Three-valued commutative pseudo-Sheffer functions. **(82h:03019)**
- Pilz, Günter (with So, Yong Sian) Near-rings of polynomials over Ω -groups. **(82e:16034)**
- Schweigert, Dietmar Polynomvollständige, atomistische Polaritätsverbände. [Polynomially complete, atomistic polarity lattices] **(82m:06009)**
- So, Yong Sian See Pilz, Günter, (82e:16034)
- Szendrei, Ágnes On closed classes of quasilinear functions. **(82h:03053)**

08A45 Equational compactness

08A50 Word problems [See also 03D40, 20F10.]

- Krjzovskikh, G. V. Approximability of finitely presented algebras. (Russian) **82f:08004**

Mönting, Jürgen Schulte Cut elimination and word problems for varieties of lattices. **82j:08005**

Silberger, D. M. Universal terms of complexity three. **82b:08006**

secondary classifications:

Rus, Teodor HAS-Hierarchy; a natural tool for language specification. **(82k:68046)**

08A55 Partial algebras

Vagner, V. V. Restrictive sums of exterior operatives and their natural extension. (Russian) **82f:08005**

secondary classifications:

Burgin, M. S. Functional equivalence of operators and parallel computation. **(82m:68104)**

Ljapin, E. S. Partielle Operationen in der Theorie der Halbgruppen. **(82g:20069)**

Németi, István From hereditary classes to varieties in abstract model theory and partial algebra. **(82a:03025)**

08A60 Unary algebras

Bartol, Wiktor Subalgebra lattices of mono-unary algebras. **82f:08006**

Jakubiková-Studenovská, Danica On weakly rigid monounary algebras. (Russian summary) **82f:08007**

Kartašov, V. K. Quasivarieties of unars with a finite number of cycles. (Russian) **82d:08006**

Kopeček, Ivan Distinguishing subsets in general algebras. (Czech summary) **82e:08004**

Länger, Helmut Homogeneous superassociative systems. **82i:08003a**
Superassociative systems with given semigroup of inner right translations. **82i:08003b**

secondary classifications:

Chvalina, Jan On connected unars with regular endomorphism monoids. **(82a:08003)**

Kollár, János The category of unary algebras containing a given subalgebra. II. **(82e:18004)**

Pálffy, Péter Pál (with Pudlák, Pavel) Congruence lattices of finite algebras and intervals in subgroup lattices of finite groups. **(82g:08003)**

Pudlák, Pavel See Pálffy, Péter Pál, **(82g:08003)**

Sichler, J. Group-universal unary varieties. **(82a:08006)**

08A65 Infinitary algebras

secondary classifications:

Căzănescu, Virgil Emil On the uniqueness of the solution of a system of context-free equations. **(82j:68072)**

Hodges, Wilfrid Functorial uniform reducibility. **(82e:03030)**

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Bandyopadhyay, S. P. (with Chandra, Subha) Valuation and Archimedean classes in U -algebras. **82g:08009**

Burgetová, Renata (with Klucký, Dalibor) The spectrum of a Cartesian product of plural algebras. (Czech summary) **82m:08004**

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Hejný, Milan Categories of Klein spaces. (Slovak and Russian summaries) **82f:08008**

Hickin, Kenneth Keller (with Plotkin, J. M.) Boolean powers: direct decomposition and isomorphism types. **82e:08005**

Hof, Hartmut (with Howard, P. E.) Representing multi-algebras by algebras, the axiom of choice, and the axiom of dependent choice. **82j:08007**

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Korec, Ivan Concrete representation of some equivalence lattices. (Russian summary) **82g:08010**

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A generalization of x -ideals. II. **82k:08004b**

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Pondělíček, Bedřich On the intersection graph of a commutative distributive groupoid. (Russian summary) **82e:08006**

Sureau, Yves Hypergroupes opérant transitivement sur un ensemble. **82f:08009**

Zurek-Etgens, Maria La définition et le prolongement de la solution de l'équation de translation. **82e:08004**

secondary classifications:

Agnadé i Bover, Jaume Cohomology of binary systems. **(82k:55011)**

Benjaminov, E. M. An algebraic approach to models of data bases of relational type. (Russian) **(82h:68127a)**

Algebraic structure of relational models of data bases. (Russian. English and German summaries) **(82h:68127b)**

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Corcoran, John Categoricity. **(82j:03034)**

Duffus, Dwight (with Rival, Ivan) A structure theory for ordered sets. **(82f:06001)**

Felea, V. Relational V -algebras over free theories. **(82j:68034)**

Länger, Helmut Commutative quasitrivial superassociative systems. **(82a:20082)**

Lawrence, John W. Boolean powers of groups. **(82f:06023)**

Letizia, Angiola On a special algebra with two operations. **(82k:16048)**

Lynch, Nancy A. (with Blum, Edward K.) Relative complexity of algebras. **(82f:68018)**

Meseguer Gualta, José Varieties of chain-complete algebras. **(82g:18005)**

A Birkhoff-like theorem for algebraic classes of interpretations of

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Paljutin, E. A. (with Seese, Detlef G.; Taimanov, A. D.) A remark on the topologization of algebraic structures. **(82i:54083)**

Popescu, E. Sur les connexions Galois. **(82a:04001)**

Radu, Gheorghe Gh. (with Ștefănescu, Mirela; Tofan, I.) On algebraic theories. **(82j:18011)**

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Seese, Detlef G. See Paljutin, E. A.; et al., **(82i:54083)**

Ștefănescu, Mirela See Radu, Gheorghe Gh.; et al., **(82j:18011)**

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08Bxx Varieties

08B05 Equational logic, Mal'cev conditions

Andriksa, Hajnal (with Németi, István) On systems of varieties definable by schemes of equations. **82d:08007**

Brodskii, S. D. (with Kogalovskii, S. R.) Remarks on varieties of algebraic systems. (Russian) **82m:08005**

Burris, Stanley (with Lawrence, J.) A correction to: "Definable principal congruences in varieties of groups and rings" [Algebra Universalis 9 (1979), no. 2, 152-164; MR 80c:08004]. **82j:08008**

Butson, A. T. See Leeson, J. J., **82h:08007** and **82h:08008**

Cornish, William H. A 3-distributive 2-based variety. **82a:08005**

Ésik, Zoltán Identities in iterative and rational algebraic theories. **82i:08004**

Földes, Stéphane (with Sabidussi, Gert) Recursive undecidability of the binding property for finitely presented equational classes. **82e:08007**

Graczyńska, Ewa (with Pastijn, Francis) Proofs of regular identities. **82e:08008**

Gumm, H. Peter Congruence modularity is permutability composed with distributivity. **82j:08009**

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Pollák, G. (with Szendrei, Ágnes) Independent basis for the identities of entropic groupoids. **82e:08009**

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secondary classifications:

Andriksa, Hajnal (with Németi, István) HSPK is equational class, without the axiom of choice. **(82k:03081)**

Burris, Stanley (with Lawrence, John W.) Two examples concerning the definability of the disjointness property of principal congruences. **(82f:08002)**

Callegarin, G. (with Pacini, G.) About the implementability and the power of

equationally defined data abstractions. **(82e:68046)**

Chajda, Ivan A Mal'cev characterization of tolerance regularity. **(82h:08001)**

Edmunds, Charles C. Varieties generated by semigroups of order four. **(82e:20100)**

Fedorov, A. N. Subquasivarieties of nilpotent minimal nonabelian varieties of groups. (Russian) **(82d:20030)**

Fried, E. (with Grätzer, G.; Quackenbush, R. W.) The equational class generated by weakly associative lattices with the unique bound property. **(82a:06008)**

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Kolganov, N. A. Identities in an algebra of recursive functions. (Russian) **(82d:03067)**

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Quackenbush, R. W. See Fried, E.; et al., **(82a:06008)**

Rosický, Jiří Equational categories. **(82e:18011)**

Yaqub, Fawzi M. Equationally definable Post L -algebras. **(82m:03070)**

08B10 Congruence modularity, congruence distributivity

Burris, Stanley (with McKenzie, R.) Decidable varieties with modular congruence

lattices. **82m:08006**

Chajda, Ivan Distributivity and modularity of lattices of tolerance relations. **82d:08008**

Day, Alan (with Freese, Ralph) A characterization of identities implying congruence modularity. I. **82h:08009**

Freese, Ralph (with Herrmann, Christian; Huhn, András P.) On some identities valid in modular congruence varieties. **82m:08007**

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Herrmann, Christian See Freese, Ralph; et al., **82m:08007**

Huhn, András P. See Freese, Ralph; et al., **82m:08007**

McKenzie, R. See Burris, Stanley, **82m:08006**

Stojanov, Ivan S. (with Tonov, Ivan K.) The union and product of a variety of

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Tonov, Ivan K. See Stojanov, Ivan S., 82c:08008

secondary classifications:

- Cornish, William H. Varieties generated by finite BCK-algebras. (82a:06018)
 Guman, H. Peter Congruence modularity is permutability composed with distributivity. (82j:08009)
 Sankappanavar, H. P. Remarks on subdirectly irreducible pseudocomplemented semilattices and distributive pseudocomplemented lattices. (82a:06015)

08B15 Lattices of varieties

- Blok, W. J. The lattice of varieties of modal algebras is not strongly atomic. 82c:08005
 Chong, H. M. Splitting algebra and a notion of n -retract. 82a:08005
 Dudek, József On the lattice of subvarieties of an idempotent variety. 82f:08010
 A new characterization of groupoids with at most n essentially n -ary polynomials. 82g:08012
 Džabbarzade, V. M. The structure of varieties, quasivarieties and prevarieties of universal algebras. (Russian) 82c:08006
 Dziobiak, Wiesław A variety generated by a finite algebra with 2^{n_0} subvarieties. 82a:08006
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 Hall, T. E. (with Jones, Peter R.) On the lattice of varieties of bands of groups. 82j:08011
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 Smith, Jo E. l -group varieties. 82c:08007
 Stojanova-Venkova, A. N. The lattice of the variety of associative algebras defined by a commutator of length five. (Russian) 82b:08006
 Tonov, Ivan K. Some properties of the product of varieties of associative algebras. (Russian) 82j:08012
 Tumanov, V. I. See Gorbunov, V. A., 82f:08011

secondary classifications:

- Artamonov, V. A. Minimal varieties of generalized semigroups, groups and rings. (Russian) (82d:20056)
 Beazer, R. Finitely subdirectly irreducible algebras with pseudocomplementation. (82j:06021)
 Blok, W. J. Pretabular varieties of modal algebras. (82g:03111)
 Cornish, William H. Boolean skew algebras. (82d:08005)
 Petrich, Mario (with Reilly, Norman R.) Varieties of groups and of completely simple semigroups. (82j:20107)
 Reilly, Norman R. Modular sublattices of the lattice of varieties of inverse semigroups. (with Wroblewski, Roger) Suprema of classes of generalized Scrimger varieties of lattice ordered groups. (82k:06023)
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08B20 Free algebras

- Hodges, Wilfrid In singular cardinality, locally free algebras are free. 82i:08005
 Kurka, Axel Equationally compact algebras with bases of different cardinalities. 82i:08006
 Semenov, A. L. An interpretation of free algebras in free groups. (Russian) 82b:08011

secondary classifications:

- Ježek, Jaroslav (with Kepka, Tomáš) Free entropic groupoids. (82b:20067)
 Kepka, Tomáš See Ježek, Jaroslav, (82b:20067)
 Mycielski, Jan (with Perlmutter, Paul) Model completeness of some metric completions of absolutely free algebras. (82k:03037)
 Perlmutter, Paul See Mycielski, Jan, (82k:03037)

08B25 Products, amalgamated products

- Fauknerová, Jarmila A note on the finite extensivity property. 82c:08010

secondary classifications:

- Clarke, G. T. Commutative semigroup varieties with the amalgamation property. (82f:20084)
 Czelakowski, Janusz A remark on free products. (82d:03045)

08B30 Injectives, projectives

secondary classifications:

- Düntsch, Ivo A class of projective Stone algebras. (82j:06022)
 Lai, Hon Fei On Kleene algebras. (82a:06016)

08B99 None of the above, but in this section

- Andréka, Hajnal (with Németi, István) Neat reducts of varieties. 82j:08013
 Baldwin, John T. The number of subdirectly irreducible algebras in a variety. II. 82c:08008
 Kim, Ann Chi (with Neumann, Bernhard; Rhemtulla, Akbar H.) More Fibonacci varieties. 82d:08009
 Medvedev, Ju. A. Cross varieties of algebras. (Russian) 82k:08007
 Németi, István See Andréka, Hajnal, 82j:08013

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Penner, P. Hyperidentities of lattices and semilattices. 82k:08008

Protasov, I. V. (with Sidorčuk, A. D.) On varieties of topological algebraic systems. (Russian) 82c:08009

Rhemtulla, Akbar H. See Kim, Ann Chi; et al., 82d:08009

Sichler, J. Group-universal unary varieties. 82a:08006

Sidorčuk, A. D. See Protasov, I. V., 82c:08009

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secondary classifications:

- Ferro, Alfredo (with Micale, Biagio) On models of a first-order theory in which certain formulas define a model of another theory. (Italian. English summary) (82i:03043)
 van Leeuwen, L. C. A. (with Weigandt, R.) Radicals, semisimple classes and torsion theories. (82j:17004)
 Mal'cev, Ju. N. Some examples of varieties of associative rings. (Russian) (82j:16027)
 McKenzie, Ralph Residually small varieties of semigroups. (82k:20097)
 Micale, Biagio See Ferro, Alfredo, (82i:03043)
 Prodan, N. I. On a variety of CHQ-algebras. (Russian) (82k:20112)
 Volichenko, I. B. A variety of Lie algebras connected with standard identities. I. (Russian. English summary) (82e:17011a)
 A variety of Lie algebras connected with standard identities. II. (Russian. English summary) (82e:17011b)
 Vovsi, S. M. Varieties and triangular products of projective representations of groups. (Russian) (82f:20022)
 Weigandt, R. See van Leeuwen, L. C. A., (82j:17004)

08Cxx Classes of algebras

08C05 Categories of algebras [See also 18C05.]

- Adams, M. E. (with Sichler, J.) Subfunctors of full embeddings of algebraic categories. 82k:08009
 Sichler, J. See Adams, M. E., 82k:08009
 Vasilache, Sergiu Inductive (direct) limits in the categories of heterogeneous algebras and of abstract automata. 82c:08010a
 Direct limits in the categories of nonfinitary heterogeneous algebras. 82c:08010b

secondary classifications:

- Courcelle, Bruno (with Raoult, Jean-Claude) Completions of ordered magmas. (82b:68041)
 Lehmann, Daniel J. On the algebra of order. (82b:68042)
 Nel, L. D. Universal topological algebra needs closed topological categories. (82i:18007)
 Raoult, Jean-Claude See Courcelle, Bruno, (82b:68041)

08C10 Axiomatic model classes [See also 03Cxx, in particular 03C60.]

- Bairamov, R. A. (with Mamedov, O. M.) Σ -subdirect representations in axiomatizable classes. (Russian. Azerbaijani and English summaries) 82c:08011
 Dziobiak, Wiesław On infinite subdirectly irreducible algebras in locally finite equational classes. 82m:08009
 Mamedov, O. M. See Bairamov, R. A., 82c:08011

secondary classifications:

- Brodskii, S. D. (with Kogalovskii, S. R.) Remarks on varieties of algebraic systems. (Russian) (82m:08005)
 Givant, Steven Union decompositions and universal classes categorical in power. (82c:03042)
 Hałkowska, Katarzyna ★Algebry związane z teoriami zawierającymi definicje warunkowe. (Polish) [Algebras connected with theories having conditional definitions] (82b:03020)
 Kogalovskii, S. R. See Brodskii, S. D., (82m:08005)
 Meirembekov, K. A. Remarks on theories with a bounded spectrum. (Russian) (82c:03048)
 Paljutin, E. A. Categorical Horn classes. I. (Russian) (82k:03038)
 A description of categorical positive Horn classes. (Russian) (82k:03039)

08C15 Quasivarieties

- Budkin, A. I. The axiomatic rank of a quasivariety containing a free solvable group. (Russian) 82f:08012
 Rumjancev, A. K. Quasi-identities of finite groups. (Russian) 82g:08013

secondary classifications:

- Andréka, Hajnal (with Németi, István) Neat reducts of varieties. (82j:08013)
 Calcedo Ferrer, Xavier The subdirect decomposition theorem for classes of structures closed under direct limits. (82c:08001)
 Džabbarzade, V. M. The structure of varieties, quasivarieties and prevarieties of universal algebras. (Russian) (82c:08006)
 Gorbunov, V. A. (with Tumanov, V. I.) A class of lattices of quasivarieties. (Russian) (82f:08011)
 Grätzer, G. (with Lakser, Harry; Quackenbush, R. W.) On the lattice of quasivarieties of distributive lattices with pseudocomplementation. (82c:06023)
 Kartašov, V. K. Quasivarieties of unars with a finite number of cycles. (Russian) (82d:08006)
 Lakser, Harry See Grätzer, G.; et al., (82c:06023)
 Martynov, L. M. The groupoid of prevarieties of semigroups with a zero. (Russian) (82i:20069)

- Németi, István See Andriks, Hajnal, (82j:08013)
 Quackenbush, R. W. See Grätzer, G.; et al., (82c:06023)
 Tumanov, V. I. See Gorbunov, V. A., (82f:08011)

08C99 None of the above, but in this section

- Burris, Stanley Free algebras as subdirect products. 82c:08012

10-XX NUMBER THEORY {Excluding 10Axx and 10Mxx, this classification does not distinguish work in the rational number fields from that in other algebraic number fields.}

10-01 Elementary exposition, textbooks

- (Bratz, K.) See Drinfel'd, G. I., 82k:10001
 Davenport, Harold ★Multiplicative number theory. 82m:10001
 Drinfel'd, G. I. ★Quadratur des Kreises und Transzendenz von π . (German) [Quadrature of the circle and transcendence of π] 82k:10001
 (Gel'fond, A. O.) See Drinfel'd, G. I., 82k:10001
 Gilbert, William J. (with Green, R. James) Negative based number systems. 82c:10001
 Green, R. James See Gilbert, William J., 82c:10001
 Hlawka, Edmund (with Schoissengeier, Johannes) ★Zahlentheorie. (German) [Number theory] 82d:10001
 Madsen Barbosa, Ruy Partitions of numbers with restricted parts 1-2,3, 1-2,4 and 1-2,5, by finite differences. (Portuguese. English summary) 82i:10001
 Mohanty, S. P. The number of primes is infinite. 82i:10001
 (Montgomery, Hugh L.) See Davenport, Harold, 82m:10001
 Opolka, Hans See Scharlau, Winfried, 82g:10001
 Pareja Heredia, Diego Historical account of some problems in the theory of numbers. (Spanish) 82h:10001
 (Pieper, H.) See Drinfel'd, G. I., 82k:10001
 Scharlau, Winfried (with Opolka, Hans) ★Von Fermat bis Minkowski. (German) [From Fermat to Minkowski] 82g:10001
 Schoissengeier, Johannes See Hlawka, Edmund, 82d:10001
 Zagier, Don ★Zetafunktionen und quadratische Körper. (German) [Zeta functions and quadratic fields] 82m:10002

secondary classifications:

- Alladi, Krishnaswami ★Legendre polynomials and irrational numbers. (82a:10034)
 Hanafi, A. R. Gauss's unsolved problem. (82a:10011)
 Newman, B. B. The flippin' coins problem. (82i:05007)
 Van der Poorten, Alfred J. Some wonderful formulae ... footnotes to Apéry's proof of the irrationality of $\zeta(3)$. (82a:10037)

10-02 Advanced exposition (research surveys, monographs, etc.)

- Elliott, Peter D. T. A. ★Probabilistic number theory. I. 82h:10002a
 ★Probabilistic number theory. II. 82h:10002b
 Erdős, Paul (with Graham, Ronald L.) ★Old and new problems and results in combinatorial number theory. 82j:10001
 Many old and on some new problems of mine in number theory. 82m:10003
 Graham, Ronald L. See Erdős, Paul, 82j:10001
 Moreno, Carlos Julio Harmonic tendencies in number theory. (Spanish) 82e:10002

secondary classifications:

- Cohn, Harvey ★Advanced number theory. (82b:12001)
 Davenport, Harold ★Multiplicative number theory. (82m:10001)
 Langlands, Robert P. ★Base change for $GL(2)$. (82a:10032)
 (Montgomery, Hugh L.) See Davenport, Harold, (82m:10001)

10-03 Historical (must also be assigned at least one classification number from Section 01)

- (Andreev, V.) See Edwards, Harold M., 82d:10002
 Bambah, R. P. Srinivasa Ramanujan Medal Lecture—1979. 82m:10004
 Edwards, Harold M. Fermat's last theorem. (Bulgarian) 82d:10002
 (Gauß, Carl Friedrich) See Narkiewicz, W., 82i:10002
 Narkiewicz, W. The work of C. F. Gauss in algebra and number theory. 82i:10002
 Ramanathan, K. G. Ramanujan and the congruence properties of partitions. 82e:10003

secondary classifications:

- (d'Alembert, J.) See Euler, Leonhard, (82h:01075)
 Askey, Richard A. Ramanujan's extensions of the gamma and beta functions. (82g:01030)
 Bašmakova, I. G. The *Liber quadratorum* of Leonardo of Pisa. (Russian. English summary) (82g:01017)
 Berndt, Bruce C. (with Joshi, Padmini T.; Wilson, B. M.) Chapter 2 of Ramanujan's second notebook. (82h:01038)
 (with Wilson, B. M.) Chapter 4 of Ramanujan's second notebook. (82j:01051)
 (Blanc, Charles) See Euler, Leonhard, (82h:01075)
 (Bredihin, B. M.) See Linnik, Ju. V., (82j:01077b)
 (Brun, Viggo) See Selberg, Sigmund, (82f:01142)
 Cartwright, Mary L. Some Hardy-Littlewood manuscripts. (82k:01030)
 (Clairaut, Alexis-Claude) See Euler, Leonhard, (82h:01075)
 Collison, Mary Joan The unique factorization theorem: from Euclid to Gauss. (82f:01006)
 Dick, Auguste ★Franz Mertens, 1840–1927. (German) (82i:01048)
 Ef'natov, B. A. Application of the sieve method to the problem of determining the

- number of primes. (Russian. Tajiki summary) (82m:01001)
 Erdős, Paul Some personal reminiscences of the mathematical work of Paul Turán. (82f:01090a)
 Euler, Leonhard ★Commercium epistolicum. [Correspondence] (82h:01075)
 Fiala, Jiří Srinivasa Ramanujan and the world of beautiful formulas. (Czech) (82e:01074)
 (Fibonacci, Leonardo) See Bašmakova, I. G., (82g:01017)
 (Fomenko, O. M.) See Linnik, Ju. V., (82j:01077b)
 (Grigor'jan, A. T.) See Euler, Leonhard, (82h:01075)
 (Habicht, Walter) See Euler, Leonhard, (82h:01075)
 Halász, G. The number-theoretic work of Paul Turán. (82f:01090b)
 (Hardy, Godfrey Harold) See Cartwright, Mary L., (82k:01030)
 (Hlawka, Edmund) See Dick, Auguste, (82i:01048)
 Joshi, Padmini T. See Berndt, Bruce C.; et al., (82h:01038)
 (Juković, A. P.) See Euler, Leonhard, (82h:01075)
 (Lagrange, Joseph Louis) See Euler, Leonhard, (82h:01075)
 (Legendre, A.-M.) See Pintz, János, (82e:01055)
 Lehti, Raimo Gauss's *Disquisitiones arithmeticae*. III. (Finnish. English summary) (82j:01049)
 Linnik, Ju. V. ★Избранные труды. Том I. Теория чисел. Эргодический метод и Л-функции. (Russian) [Selected works. Vol. I. Number theory. The ergodic method and L-functions] (82j:01077a)
 ★Избранные труды. Том 2. (Russian) [Selected works. Vol. 2] (82j:01077b)
 (Littlewood, J. E.) See Cartwright, Mary L., (82k:01030)
 (Malyšev, A. V.) See Linnik, Ju. V., (82j:01077b)
 (Mertens, Franz) See Dick, Auguste, (82i:01048)
 Opolka, Hans See Scharlau, Winfried, (82g:10001)
 Pareja Heredia, Diego Historical account of some problems in the theory of numbers. (Spanish) (82h:10001)
 (Picolet, Guy) See Euler, Leonhard, (82h:01075)
 Pintz, János On Legendre's prime number formula. (82e:01055)
 (Ramanujan, Srinivasa) See Fiala, Jiří, (82e:01074); Askey, Richard A., (82g:01030) and Berndt, Bruce C.; et al., (82j:01051)
 Rashed, Roshdi Ibn al-Haytham et le théorème de Wilson. (82e:01015)
 Ribenboim, Paulo Fermat's last theorem: recent developments. (82h:10023)
 Scharlau, Winfried (with Opolka, Hans) ★Von Fermat bis Minkowski. (German) [From Fermat to Minkowski] (82g:10001)
 Schmidt, Olaf On Plimpton 322. Pythagorean numbers in Babylonian mathematics. (82g:01004)
 Selberg, Sigmund Viggo Brun in memoriam. (Norwegian. English summary) (82f:01142)
 (Taton, René) See Euler, Leonhard, (82h:01075)
 (Turán, Pál) See Erdős, Paul, (82f:01090a) and Halász, G., (82f:01090b)
 (Vinogradov, A. I.) See Linnik, Ju. V., (82j:01077b)
 Wilson, B. M. See Berndt, Bruce C.; et al., (82h:01038) and (82j:01051)

Bibliography:

- Hardy, Godfrey Harold See Cartwright, Mary L., (82k:01030)
 Linnik, Ju. V. See Linnik, Ju. V., (82j:01077a)
 Littlewood, John Edensor See Cartwright, Mary L., (82k:01030)
 Mertens, Franz See Dick, Auguste, (82i:01048)

Biography:

- Linnik, Ju. V. See Linnik, Ju. V., (82j:01077a)
 Mertens, Franz See Dick, Auguste, (82i:01048)

Obituary:

- Brun, Viggo See Selberg, Sigmund, (82f:01142)

10-04 Explicit machine computation and programs (not the theory of computation or programming)

- Brent, Richard P. (with McMillan, Edwin M.) Some new algorithms for high-precision computation of Euler's constant. 82g:10002
 Succinct proofs of primality for the factors of some Fermat numbers. 82k:10002
 Felg, Ephraim On systems of bilinear forms whose minimal division-free algorithms are all bilinear. 82k:10003
 Forrest, J. See Light, William A.; et al., 82h:10003
 Hammond, N. See Light, William A.; et al., 82h:10003
 Harborth, Heiko (with Kemnitz, Arnfried) Calculations for Bertrand's postulate. 82c:10001
 Herlestad, Tore A note on Rabin's probabilistic primality test. 82g:10003
 Kemnitz, Arnfried See Harborth, Heiko, 82c:10001
 Lehmer, D. H. On Fermat's quotient, base two. 82e:10004
 Light, William A. (with Forrest, J.; Hammond, N.; Roe, S.) A note on Goldbach's conjecture. 82h:10003
 Malm, Donald G. ★A computer laboratory manual for number theory. 82j:10002
 McMillan, Edwin M. See Brent, Richard P., 82g:10002
 Nelson, Harry L. A solution to Archimedes' cattle problem. 82f:10002
 Roe, S. See Light, William A.; et al., 82h:10003
 Schnorr, C. P. Refined analysis and improvements on some factoring algorithms. 82k:10004
 Shanks, Daniel (with Williams, H. C.) Gunderson's function in Fermat's last theorem. 82g:10004
 Uppahuri, V. R. Rao Prime numbers treated as a Markov chain. 82d:10003
 Williams, H. C. See Shanks, Daniel, 82g:10004

secondary classifications:

- Adleman, Leonard M. (with Leighton, Frank Thomson) An $O(n^{1/10.89})$ primality testing algorithm. (82c:10009)
 Benjaourit, B. See Reed, I. S.; et al., (82h:68051)
 Bohman, Jan (with Fröberg, Carl-Erik) Numerical investigation of Waring's problem for cubes. (82k:10063)
 Brent, Richard P. An improved Monte Carlo factorization algorithm. (82a:10007)

- Ellis, J. R. The computation of prime numbers by Gandhi's formula for the n th prime. (82j:10010)
- Fröberg, Carl-Erik. See Bohman, Jan, (82k:10063)
- Gries, David (with Levin, Gary) Computing Fibonacci numbers (and similarly defined functions) in log time. (82g:68034b)
- Hunsucker, J. L. (with Pomerance, Carl) There are no odd super perfect numbers less than $7 \cdot 10^{24}$. (82b:10010)
- Karkoschka, E. (with Werner, P.) Einige Ausnahmen zur Rosserschen Regel in der Theorie der Riemannschen Zetafunktion. (English summary) (82i:10048)
- Leighton, Frank Thomson. See Adleman, Leonard M., (82c:10009)
- Levin, Gary. See Gries, David, (82g:68034b)
- Mossige, Svein Algorithms for computing the h -range of the postage stamp problem. (82c:10095)
- Pajunen, Seppo On two theorems of Lenstra. (82d:10015)
- Plaisted, David A. Erratum: "Fast verification, testing, and generation of large primes" [Theoret. Comput. Sci. 9 (1979), no. 1, 1-16; MR 80d:10012]. (82f:10008)
- Pomerance, Carl (with Selfridge, J. L.; Wagstaff, Samuel S., Jr.) The pseudoprimes to $25 \cdot 10^9$. (82j:10030)
- See also Hunsucker, J. L., (82b:10010)
- Reed, I. S. (with Truong, T. K.; Benjaathrit, B.) Addendum to: "A new hybrid algorithm for computing a fast discrete Fourier transform" [IEEE Trans. Comput. 28 (1979), no. 7, 487-492; MR 80c:68078] by Reed and Truong. (82b:68051)
- Saito, Sadao Some expressions for 15 and 1978. (82c:10025)
- Selfridge, J. L. See Pomerance, Carl; et al., (82j:10030)
- Suyama, Hiromi Searching for prime factors of Fermat numbers with a microcomputer. (Japanese) (82c:10012)
- Truong, T. K. See Reed, I. S.; et al., (82b:68051)
- Urbanek, Friedrich J. An $O(\log n)$ algorithm for computing the n th element of the solution of a difference equation. (82g:68034a)
- Wagstaff, Samuel S., Jr. See Pomerance, Carl; et al., (82j:10030)
- Werner, P. See Karkoschka, E., (82i:10048)
- Williams, H. C. A numerical investigation into the length of the period of the continued fraction expansion of \sqrt{D} . (82i:10011)
- Zenkin, A. A. A generalization of a theorem of G. Pall. (Russian) (82f:10017)

10-06 Proceedings, conferences, etc.

- (Bertin, Marie-José) See Seminar: Number Theory, 82j:10004
- (Bicknell-Johnson, Marjorie) See Collection: Manuscripts related to the Fibonacci sequence, 82f:10003
- (Fomenko, O. M.) See Analytic number theory and the theory of functions, 82m:10005 (Halberstam, Heini) See Recent progress in analytic number theory, 82k:10005 (Hoggatt, Verner E., Jr.) See Collection: Manuscripts related to the Fibonacci sequence, 82f:10003
- (Hooley, C.) See Recent progress in analytic number theory, 82k:10005
- (Jagannathan, R.) See Proceedings: Conference on Number Theory, 82d:10005 (Kuz'mina, G. V.) See Analytic number theory and the theory of functions, 82m:10005 (Mal'nev, A. V.) See Studies in number theory, 82j:10005
- (Mauclair, Jean-Loup) See Analytic number theory, 82h:10004
- (Ribenhorn, Paulo) See Proceedings: Queen's Number Theory Conference, 82j:10003 (Ryskov, S. S.) See Geometry of positive quadratic forms, 82a:10001 (Tatuzawa, Tika) See Analytic number theory, 82h:10004 (Whiteman, Albert Leon) See Theory of numbers, 82c:10006
- Analytic number theory ★Théorie analytique des nombres. (French) [Analytic number theory] 82k:10004
- Analytic number theory and the theory of functions ★Аналитическая теория чисел и теория функций. 4. (Russian) [Analytic number theory and the theory of functions. 4] 82m:10005
- Anniversary:
Fibonacci Association ★A collection of manuscripts related to the Fibonacci sequence. 82f:10003
- Collection:
Manuscripts related to the Fibonacci sequence ★A collection of manuscripts related to the Fibonacci sequence. 82f:10003
- Conference:
Analytic and Elementary Number Theory ★Journées de Théorie Analytique et Élémentaire des Nombres. (French) [Conference on Analytic and Elementary Number Theory] 82h:10001
- Number Theory ★Proceedings of the Conference on Number Theory. 82d:10005
- Recent Developments in Number Theory ★Proceedings of the Queen's Number Theory Conference, 1979. 82j:10003
- Durham ★Recent progress in analytic number theory. Vol. 1. 82k:10005a
- ★Recent progress in analytic number theory. Vol. 2. 82k:10005b
- Fibonacci sequence ★A collection of manuscripts related to the Fibonacci sequence. 82f:10003
- Geometry of positive quadratic forms ★Геометрия положительных квадратичных форм. (Russian) [Geometry of positive quadratic forms] 82a:10001
- Kingston, Ont. ★Proceedings of the Queen's Number Theory Conference, 1979. 82j:10003
- Mysore ★Proceedings of the Conference on Number Theory. 82d:10005
- Number theory ★Number theory. (Japanese) 82c:10002
- ★Proceedings of the Conference on Number Theory. 82d:10005
- ★Journées de Théorie Analytique et Élémentaire des Nombres. (French) [Conference on Analytic and Elementary Number Theory] 82h:10001
- ★Théorie analytique des nombres. (French) [Analytic number theory] 82h:10004
- Orsay ★Journées de Théorie Analytique et Élémentaire des Nombres. (French) [Conference on Analytic and Elementary Number Theory] 82h:10001
- Paris ★Séminaire de Théorie des Nombres, Paris 1979-80. [Seminar on Number Theory, Paris 1979-80] 82j:10004
- Pasadena, Calif. ★Theory of numbers. 82c:10006

Proceedings:

- Conference on Number Theory ★Proceedings of the Conference on Number Theory. 82d:10005
- Queen's Number Theory Conference ★Proceedings of the Queen's Number Theory Conference, 1979. 82j:10003
- Proceedings of Symposia in Pure Mathematics ★Theory of numbers. 82d:10006
- Recent progress in analytic number theory ★Recent progress in analytic number theory. Vol. 1. 82k:10005a
- ★Recent progress in analytic number theory. Vol. 2. 82k:10005b
- Seminar:
Delange-Pisot-Poitou ★Séminaire de Théorie des Nombres, Paris 1979-80. [Seminar on Number Theory, Paris 1979-80] 82j:10004
- Number Theory ★Séminaire de Théorie des Nombres, Paris 1979-80. [Seminar on Number Theory, Paris 1979-80] 82j:10004
- ★Séminaire de Théorie des Nombres, 1980-1981. (French) [Seminar on Number Theory, 1980-1981] 82m:10006
- Studies in number theory ★Исследования по теории чисел. 7. (Russian) [Studies in number theory. 7] 82j:10005
- Symposium:
Analytic Number Theory ★Théorie analytique des nombres. (French) [Analytic number theory] 82k:10004
- Number Theory ★Number theory. (Japanese) 82c:10002
- Recent Developments in the Theory of Numbers ★Theory of numbers. 82d:10006
- Recent Progress in Analytic Number Theory ★Recent progress in analytic number theory. Vol. 1. 82k:10005a
- ★Recent progress in analytic number theory. Vol. 2. 82k:10005b
- Talence ★Séminaire de Théorie des Nombres, 1980-1981. (French) [Seminar on Number Theory, 1980-1981] 82m:10006
- Théorie analytique des nombres ★Théorie analytique des nombres. (French) [Analytic number theory] 82h:10004
- Theory of numbers ★Theory of numbers. 82d:10006
- Tokyo ★Théorie analytique des nombres. (French) [Analytic number theory] 82k:10004

secondary classifications:

- (Glazunov, N. M.) See Computations in algebra, number theory and combinatorics, (82d:20006)
- (Kalužnin, L. A.) See Computations in algebra, number theory and combinatorics, (82d:20006)
- Algebra ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] (82d:20006)
- Automorphic forms, representation theory and arithmetic ★Automorphic forms, representation theory and arithmetic. (82i:10036)
- Bombay ★Automorphic forms, representation theory and arithmetic. (82i:10036)
- Colloquium:
Automorphic Forms, Representation Theory and Arithmetic ★Automorphic forms, representation theory and arithmetic. (82i:10036)
- Combinatorics ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] (82d:20006)
- Computations in algebra, number theory and combinatorics ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] (82d:20006)
- Number theory ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] (82d:20006)

10Axx Elementary number theory (For analogues in number fields, see 12A05.)

- Boas, R. P. Some remarkable sequences of integers. (See 82c:00006)

secondary classifications:

- Hlawka, Edmund (with Schoissengeier, Johannes) ★Zahlentheorie. (German) [Number theory] (82d:10001)
- Schoissengeier, Johannes See Hlawka, Edmund, (82d:10001)

10A05 Multiplicative structure of the integers (GCD, etc.)

- Abbott, H. L. Extremal problems on nonaveraging and nondividing sets. 82j:10005
- Balasubramanyam, G. See Hanumanthachari, J., 82k:10006
- Davis, Daniel (with Shisha, Oved) Simple proofs of the fundamental theorem of arithmetic. 82b:10002
- Hanumanthachari, J. (with Balasubramanyam, G.) Certain number theoretic examples. 82k:10006
- Heichelheim, Peter There exist five Duffinian consecutive integers but not six. 82i:10003
- Hilton, Peter (with Pedersen, Jean) Casting out nines revisited. 82k:10007
- Katzourakis, Jason On some properties of numbers. 82j:10006
- On some finite sequences of numbers. 82j:10007
- Khare, S. P. On the prime factorization of $\binom{n}{k}$. 82b:10003
- Marcus, Daniel A. An alternative to Euclid's algorithm. 82c:10005
- Pedersen, Jean See Hilton, Peter, 82k:10007
- Shisha, Oved See Davis, Daniel, 82b:10002
- Singmaster, David Divisibility of binomial and multinomial coefficients by primes and prime powers. 82k:10008
- secondary classifications:
- Erdős, Paul (with Tenenbaum, Gérard) Sur la structure de la suite des diviseurs d'un entier. (English summary) (82h:10061)
- Hewel, Erhard (with Sachs, Horst) Counting residues modulo a prime in Pascal's triangle. (82i:05003)

- McBeth, Rod A note on exponential polynomials and prime factors. (82i:03053)
 Rieger, G. J. Über Lipschitz-Folgen. (82a:10055)
 Sachs, Horst See Hexel, Erhard, (82i:05003)
 Tenenbaum, Gérald See Erdős, Paul, (82h:10061)

10A10 Congruences, primitive roots

- Ecker, A. Comment on the note: "The congruence $a^{m'} \equiv a' \pmod{m}$ " [Amer. Math. Monthly 85 (1978), no. 2, 97-100; MR 57 #12355] by A. E. Livingston and M. L. Livingston. 82g:10006
 Hossain, Md. Fazlee Least upper bound of the number of quadratic residue in interval modulo p . (Bengali summary) 82m:10007
 Laugwitz, Detlef Quadratsummen in Restklassenringen. 82d:10007
 Lee, Kok Huat The generalised Chinese remainder theorem. 82b:10004 (Livingston, A. E.) See Ecker, A., 82g:10006
 (Livingston, M. L.) See Ecker, A., 82g:10006
 Rosen, Kenneth H. A congruence from Dedekind sums. 82i:10004
 Rosenthal, John W. Card shuffling. 82h:10005
 Somer, Lawrence The residues of n^m modulo p . 82g:10007
 Wagstaff, Samuel S., Jr. The computational complexity of solving exponential congruences. 82k:10009

secondary classifications:

- Andrews, George E. (with Foata, Dominique) Congruences for the q -secant numbers. (82d:05018)
 Foata, Dominique See Andrews, George E., (82d:05018)
 Grundhöfer, Theo (with Lüneburg, Heinz) Über die Summation von Reihen aus linearen Schieberegisterfolgen. (82c:40002)
 Karuppan Chetty, C. S. The number of odd binomial coefficients. (82k:05009)
 Lüneburg, Heinz ★ Galoisfelder, Kreisteilungskörper und Schieberegisterfolgen. (German) [Galois fields, cyclotomic fields and shift-register sequences] (82h:12018)
 See also Grundhöfer, Theo, (82c:40002)
 Ryan, W. J. Proof of the quadratic reciprocity law in primitive recursive arithmetic. (82h:03104)

10A15 Power residues, reciprocity

- Bernardi, Dominique Résidus de puissances et formes quadratiques. 82e:10006
 Brown, Ezra The first proof of the quadratic reciprocity law, revisited. 82d:10008
 Chowla, Sarvadaman (with Cowles, M.; Cowles, John R.) On the difference of cubes (mod p). 82e:10002
 Cowles, John R. See Chowla, Sarvadaman; et al., 82e:10002
 Cowles, M. See Chowla, Sarvadaman; et al., 82e:10002
 Gupta, Hansraj Product decomposition of complete residue sets. 82d:10010
 Hudson, Richard H. (with Williams, Kenneth S.) Some new residuacity criteria. 82f:10004
 (with Williams, Kenneth S.) A new criterion for 7 to be a fourth power (mod p). 82e:10007
 Joshi, V. S. On a product decomposition of complete set of residues. 82d:10009
 Kraft, James (with Rosen, Michael) Eisenstein reciprocity and n th-power residues. 82g:10008
 Monzingo, M. G. On the distribution of quadratic residues. 82g:10009
 Rosen, Kenneth H. Least positive residues and the quadratic character of two. 82h:10005
 Rosen, Michael See Kraft, James, 82g:10008
 Williams, Kenneth S. See Hudson, Richard H., 82e:10007 and 82f:10004

secondary classifications:

- Bentz, Hans-J. (with Pintz, János) Quadratic residues and the distribution of prime numbers. (82e:10072)
 Furuta, Yoshiomi A prime decomposition symbol for a nonabelian central extension which is abelian over a bicyclic biquadratic field. (82a:12008)
 Pintz, János See Bentz, Hans-J., (82e:10072)
 Rosen, Kenneth H. A congruence from Dedekind sums. (82i:10004)
 Ryan, W. J. Proof of the quadratic reciprocity law in primitive recursive arithmetic. (82h:03104)

10A20 Number-theoretic functions, related numbers; inversion formulas

- Ahmad, Z. U. (with Siddiqui, Z. U.; Sitaramachandra Rao, R.; Murty, G. Sri Rama Chandra) The number of M -void divisors of an integer. 82g:10010
 Allakov, I. See Israelov, M. I., 82m:10009
 Audinayana Moorthy, S. Lambert series and the Dirichlet product. 82e:10008
 Balasubramanian, N. Arithmetic functions of several variables, some multiplicative functions and their applications. 82e:10009
 Bellamy, O. S. (with Cadogan, C. C.) Subsets of positive integers: their cardinality and maximality properties. 82b:10006
 Brillhart, John A double inversion formula. 82a:10003
 Cadogan, C. C. See Bellamy, O. S., 82b:10006
 Carlitz, L. Some sums containing the greatest integer function. 82h:10007
 Many-term relations for multiple Dedekind sums. 82e:10003
 Chavla, L. M. A generalized derivation of arithmetic functions. 82f:10005
 Cohen, Graeme L. Even perfect numbers. 82e:10019
 Dumont, Michel (with Meus, Jean) The four-numbers game. 82e:10010
 Erdős, Paul (with Györy, Kálmán; Papp, Zoltán) On some new properties of functions $\sigma(n)$, $\varphi(n)$, $d(n)$ and $\tau(n)$. (Hungarian. English summary) 82a:10004
 (with Nicolas, J. L.) Grandes valeurs d'une fonction liée au produit d'entiers consécutifs. (See 82h:10001)
 Ewell, John A. On the multiplicative structure of odd perfect numbers. 82a:10005

- Éőv, I. I. The Euler formula in number theory and its generalization. (Russian. English summary) 82j:10008
 Goldberg, Larry A. An elementary proof of the Petersson-Knopp theorem on Dedekind sums. 82a:10006
 Gryteuk, Aleksandr An identity involving Ramanujan's sum. 82e:10004
 Gupta, Hansraj Euler's totient function and its inverse. 82m:10008
 Györy, Kálmán See Erdős, Paul; et al., 82a:10004
 Harris, V. C. See Subbarao, M. V., 82e:10015
 Indlekofer, Karl-Heinz On sets characterizing additive and multiplicative arithmetic functions. 82e:10011
 Ismail, Mourad E. H. (with Subbarao, M. V.) Unitary analogue of Carmichael's problem. 82d:10011
 Israelov, M. I. (with Allakov, I.) Some estimates for a divisor function. (Russian) 82m:10009
 Jagannathan, R. A matrix approach to certain inverses of arithmetic functions. 82e:10012
 Kimura, Noriaki (with Siebert, Hartmut) Über die rationalen Nullstellen der von Potenzsummen der natürlichen Zahlen definierten Polynome. 82e:10013
 Kishore, Masao On the equation $\sigma(m)\sigma(n) = (m+n)^2$. 82e:10014
 On odd perfect, quasiperfect, and odd almost perfect numbers. 82h:10006
 Knopfmacher, J. Initial digits in number theory. 82f:10006
 Krishnamurthy, C. Some sets of amicable numbers of higher order. 82m:10010
 Malik, H. N. (with Qadir, A.) Break-up of integers and bracket functions in terms of bracket functions. 82h:10007
 Meus, Jean See Dumont, Michel, 82e:10010
 Minoli, Daniel Issues in nonlinear hyperperfect numbers. 82e:10005
 Structure issues for hyperperfect numbers. 82m:10011
 Murty, G. Sri Rama Chandra See Ahmad, Z. U.; et al., 82g:10010
 Nicolas, J. L. See Erdős, Paul, (See 82b:10001)
 Noordzij, P. On $[na] + [nb] = [nc] + [nd]$ for all positive integers n . 82g:10011
 Papp, Zoltán See Erdős, Paul; et al., 82a:10004
 Pomerance, Carl On the distribution of amicable numbers. II. 82m:10012
 Qadir, A. See Malik, H. N., 82h:10007
 Raitzin, Carlos Memoir on Dirichlet series and the analytic representation of arithmetic functions. (Spanish) 82e:10075
 te Riele, Herman J. J. Hyperperfect numbers with three different prime factors. 82c:10006
 Siddiqui, Z. U. See Ahmad, Z. U.; et al., 82g:10010
 Siebert, Hartmut See Kimura, Noriaki, 82e:10013
 Sitaramachandra Rao, R. See Suryanarayana, D., 82b:10008 and Ahmad, Z. U.; et al., 82g:10010
 Sita Ramaiah, V. (with Suryanarayana, D.) On certain divisor sums over square-full integers. 82f:10007
 Sivaramakrishnan, R. On extended Ramanujan sums. 82h:10008
 Subbarao, M. V. (with Harris, V. C.) A transformation formula for a class of arithmetic sums. 82e:10015
 See also Ismail, Mourad E. H., 82d:10011
 Suryanarayana, D. (with Sitaramachandra Rao, R.) On an identity of Eckford Cohen. II. 82b:10008
 An upper bound for $\sigma(N)/N$. 82d:10012
 See also Sita Ramaiah, V., 82f:10007
 Wagstaff, Samuel S., Jr. Large Carmichael numbers. 82c:10007
 Wall, David W. Conditions for $\varphi(N)$ to properly divide $N-1$. 82h:10009
 Yorinaga, Masataka Search for absolute pseudoprime numbers. (Japanese) 82e:10008

secondary classifications:

- Erdős, Paul (with Hall, R. R.) On the Möbius function. (82c:10065)
 Fujii, Akio A remark on the Riemann hypothesis. (82g:10056)
 Garunov, N. G. On the sum of powers of the divisors of reducible quadratic polynomials. (Russian. Tajiki summary) (82g:10065)
 Guy, Richard K. (with Wunderlich, Marvin C.) Computing unitary aliquot sequences—a preliminary report. (82h:10012)
 Hall, R. R. See Erdős, Paul, (82c:10065)
 Hunsucker, J. L. (with Pomerance, Carl) There are no odd super perfect numbers less than $7 \cdot 10^{24}$. (82b:10010)
 Kac, Victor G. Simple Lie groups and the Legendre symbol. (82f:20072)
 Mercier, Armel Quelques identités arithmétiques. (82h:10059)
 Meyer, Jacques Ensembles d'unicité pour les fonctions additives. Étude analogue dans le cas des fonctions multiplicatives. (82m:10077)
 Murty, G. Sri Rama Chandra (with Sitaramachandra Rao, R.) On M -void integers. (82i:10061)
 Nair, Mohan (with Shiu, P.) On some results of Erdős and Mirsky. (82b:10060)
 Perelli, A. (with Zannier, U.) On a theorem of Pólya. (Italian. English summary) (82i:30042)
 Pomerance, Carl See Hunsucker, J. L., (82b:10010)
 Raitzin, Carlos The exact count of the prime numbers that do not exceed a given upper bound. (Spanish) (82e:10074)
 Shiu, P. See Nair, Mohan, (82b:10060)
 Sitaramachandra Rao, R. See Murty, G. Sri Rama Chandra, (82i:10061)
 Smoryński, Craig Some rapidly growing functions. (82c:03064)
 Tanaka, Minoru On the Möbius and allied functions. (82e:10079)
 Williams, Kenneth S. Remark on an assertion of Chowla. (82m:10060)
 Wunderlich, Marvin C. See Guy, Richard K., (82h:10012)
 Zannier, U. See Perelli, A., (82i:30042)

10A21 Counting functions

- Hansen, Rodney T. Greatest integer power and root sums. 82d:10013

secondary classifications:

- Abbott, H. L. Extremal problems on nonaveraging and nondividing sets. (82j:10005)

- Kimberling, Clark Fractional parts ($nr-s$), almost arithmetic sequences, and Fibonacci numbers. (82m:10019)
 Stothers, W. W. On a result of Petersson concerning the modular group. (82c:10026)

10A22 Abstract theory of number-theoretic functions

- Ferrero, Miguel On generalized convolution rings of arithmetic functions. 82i:10005
 Hayashi, Mitsutoshi On some Dirichlet series generated by an arithmetic function. 82i:10006

secondary classifications:

- Audinarayana Moorthy, S. Lambert series and the Dirichlet product. (82e:10008)
 Harris, V. C. See Subbarao, M. V., (82e:10015)
 Knopfmacher, J. Initial digits in number theory. (82f:10006)
 Subbarao, M. V. (with Harris, V. C.) A transformation formula for a class of arithmetic sums. (82e:10015)

10A25 Elementary prime number theory, factorization

- Adleman, Leonard M. (with Leighton, Frank Thomson) An $O(n^{1/10.89})$ primality testing algorithm. 82c:10009
 Ahmad, Sarwar Naseeruddin Roots of equation of any degree. 82g:10012
 Backstrom, Robert P. Table errata: "A method of factoring and the factorization of F_7 " [Math. Comp. 29 (1975), 183-205; MR 51 #8017] by M. A. Morrison and J. Brillhart. 82a:10009
 (Baillie, Robert) See Keller, Wilfrid, 82m:10013
 Brent, Richard P. An improved Monte Carlo factorization algorithm. 82a:10007
 (Brillhart, John) See Backstrom, Robert P., 82b:10009
 Cohen, Graeme L. (with Hendy, M. D.) On odd multiperfect numbers. Addendum to: "Polygonal supports for sequences of primes" [Math. Chronicle 9 (1980), 120-136; MR 81j:10006]. 82j:10009
 (Cormack, G. V.) See Keller, Wilfrid, 82k:10011
 Ellis, J. R. The computation of prime numbers by Gandhi's formula for the n th prime. 82j:10010
 Erdős, Paul On prime factors of binomial coefficients. (Hungarian) 82k:10010
 Faiziev, R. F. Two criteria for the theory of k -twin primes. (Russian. Tajiki summary) 82a:10008
 Two general criteria for the primeness of the three numbers n , $n+2k$, $n+2m$. (Russian. Tajiki summary) 82b:10010
 Golomb, Solomon W. Corrections to: "Cyclotomic polynomials and factorization theorems" [Amer. Math. Monthly 85 (1978), no. 9, 734-737; MR 80c:10011]. 82c:10010
 Hendy, M. D. See Cohen, Graeme L., 82j:10009
 Hunsucker, J. L. (with Pomerance, Carl) There are no odd super perfect numbers less than $7 \cdot 10^{24}$. 82b:10010
 Keller, Wilfrid Table errata: "Some very large primes of the form $k \cdot 2^m + 1$ " [Math. Comp. 35 (1980), no. 152, 1419-1421; MR 81i:10011] by G. V. Cormack and H. C. Williams. 82k:10011
 Table errata: "New primes of the form $k \cdot 2^m + 1$ " [Math. Comp. 33 (1979), no. 148, 1333-1336; MR 80h:10009] by R. Baillie. 82m:10013
 Leighton, Frank Thomson See Adleman, Leonard M., 82c:10009
 (Morrison, M. A.) See Backstrom, Robert P., 82b:10009
 Norton, Karl K. Acknowledgment of priority: "Remarks on the number of factors of an odd perfect number" [Acta Arith. 6 (1960/61), 365-374; MR 26 #4950]. 82a:10014
 Pajunen, Seppo On two theorems of Lenstra. 82a:10015
 Plaisted, David A. Erratum: "Fast verification, testing, and generation of large primes" [Theoret. Comput. Sci. 9 (1979), no. 1, 1-16; MR 80d:10012]. 82f:10008
 Pomerance, Carl See Hunsucker, J. L., 82b:10010
 Pritchard, Paul A sublinear additive sieve for finding prime numbers. 82c:10011
 Rotkiewicz, A. (with Wasén, R.) Lehmer's numbers. 82a:10009
 Sentance, W. A. Occurrences of consecutive odd powerful numbers. 82d:10016
 Suyama, Hiromi Searching for prime factors of Fermat numbers with a microcomputer. (Japanese) 82c:10012
 Wasén, R. See Rotkiewicz, A., 82a:10009
 Weimer, Richard C. Primeness for the Gaussian integers. 82g:10013
 Weitsman, Jonathan A general test for divisibility by primes. 82d:10017
 (Williams, H. C.) See Keller, Wilfrid, 82k:10011

secondary classifications:

- Bakos, Tibor Magic square of prime numbers. (Hungarian) (82b:05029)
 Borho, Walter Some large primes and amicable numbers. (82d:10021)
 Brent, Richard P. Succinct proofs of primality for the factors of some Fermat numbers. (82k:10002)
 Dixon, John D. Asymptotically fast factorization of integers. (82a:10010)
 Herlestam, Tore A note on Rabin's probabilistic primality test. (82g:10003)
 Monier, Louis Evaluation and comparison of two efficient probabilistic primality testing algorithms. (82a:68078)
 Pomerance, Carl (with Selfridge, J. L.; Wagstaff, Samuel S., Jr.) The pseudoprimes to $25 \cdot 10^7$. (82g:10030)
 Schnorr, C. P. Refined analysis and improvements on some factoring algorithms. (82k:10004)
 Schram, John Michael Recursively prime sequences. (82i:10012)
 Selfridge, J. L. See Pomerance, Carl; et al., (82g:10030)
 Uppuhuri, V. R. Rao Prime numbers treated as a Markov chain. (82d:10003)
 Wagstaff, Samuel S., Jr. See Pomerance, Carl; et al., (82g:10030)

10A30 Algorithms and expansions; digital properties {For metric results, see 10K10.}

- Dixon, John D. Asymptotically fast factorization of integers. 82a:10010

- Ernest, P. On the adequacy of the Egyptian representation of fractions. 82m:10014
 Furno, Anne L. See Prichett, G. D.; et al., 82g:10014
 (Gupta, Hansraj) See Narkiewicz, W., 82m:10015
 Hanafi, A. R. Gauss's unsolved problem. 82a:10011
 Hasse, Helmut Iterierter Differenzbetrag für 2-stellige g -adische Zahlen. (Spanish summary) 82i:10007
 Hendy, M. D. (with Jeans, N. S.) The Jacobi-Perron algorithm in integer form. 82j:10011
 Jeans, N. S. See Hendy, M. D., 82j:10011
 Lapenta, J. F. See Prichett, G. D.; et al., 82g:10014
 Long, Calvin T. The decimal expansion of $1/89$ and related results. 82b:10011
 Narkiewicz, W. A note on a paper of H. Gupta concerning powers of two and three: "Powers of 2 and sums of distinct powers of 3" [Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 602-633 (1978), 151-158 (1979); MR 81g:10016]. (Serbo-Croatian summary) 82m:10015
 Prichett, G. D. (with Furno, Anne L.; Lapenta, J. F.) The determination of all decadic Kaprekar constants. 82g:10014
 Rees, Charles Sparks Egyptian fractions. 82m:10016
 Stolarsky, Kenneth B. Integers whose multiples have anomalous digital frequencies. 82b:10012
 Trigg, Avetta See Trigg, Charles W., 82g:10019
 Trigg, Charles W. A miscellany of 1979 curiosa. 82g:10015
 101 faces of 1979. 82g:10016
 Determinants related to 1979. 82g:10017
 Reiterative routines applied to 1979. 82g:10018
 (with Trigg, Avetta) 1979 and associated primes. 82g:10019
 Square repdigits. 82b:10011
 A nine-digit prime array. 82b:10013
 Special nine-digit palindromic primes. 82i:10008
 Vijayakumar Cyclic numbers. 82g:10012
 Washington, Lawrence C. Benford's law for Fibonacci and Lucas numbers. 82f:10009

secondary classifications:

- Buck, R. Creighton Sherlock Holmes in Babylon. (82i:01005)
 Koren, Israel (with Maliniak, Yoram) On classes of positive, negative, and imaginary radix number systems. (82k:68006)
 Maliniak, Yoram See Koren, Israel, (82k:68006)
 Pisot, Charles Sur des développements en algorithmes de Jacobi de certaines irrationnelles liées à des fonctions de Bessel. (English summary) (82b:10042)
 Winans, Charles F. The Fibonacci series in the decimal equivalents of fractions. (82g:10034)

10A32 Continued fractions {For approximation results, see 10F20; see also 30B70, 40A15.}

- Bodnárčuk, P. I. (with Pastomel'nikov, I. P.; Krovickii, I. I.) Representation of algebraic irrationals by branching continued fractions. (Russian) 82a:10012
 Cohen, Henri Accélération de la convergence de certaines récurrences linéaires. [Acceleration of the convergence of certain linear recurrences] (See 82m:10006)
 Edgar, Hugh See Thoro, Dmitri, 82b:10014
 Krovickii, I. I. See Bodnárčuk, P. I.; et al., 82a:10012
 Krupka, Z. I. Arithmetic operations on continued fractions. (Russian) 82f:10010
 Pastomel'nikov, I. P. See Bodnárčuk, P. I.; et al., 82a:10012
 Radovici, Paul Sur la densité naturelle des numérateurs des réduites des fractions continues régulières. 82i:10009
 Richards, Ian Continued fractions without tears. 82i:10010
 Thoro, Dmitri (with Edgar, Hugh) Exploring an algorithm. 82b:10014
 Williams, H. C. A numerical investigation into the length of the period of the continued fraction expansion of \sqrt{D} . 82f:10011

secondary classifications:

- Appelgate, Harry (with Onishi, Hironori) Continued fractions and the conjugacy problem in $SL_2(\mathbb{Z})$. (82i:20052)
 Onishi, Hironori See Appelgate, Harry, (82i:20052)
 Popov, V. N. Asymptotic behavior of the sum of sums of the elements of continued fractions for numbers of the type a/p . (Russian. English summary) (82a:10013)
 Teh, Oh Kian Continued fractions and linear Diophantine equations. (82a:10017)

10A35 Recurrence sequences

- Ando, Shiro A note on the polygonal numbers. 82j:10013
 Backstrom, Robert P. On reciprocal series related to Fibonacci numbers with subscripts in arithmetic progression. 82d:10018
 Bastida, Julio R. (with DeLeon, M. J.) A quadratic property of certain linearly recurrent sequences. 82f:10012
 Bézivin, Jean-Paul Factorisation de suites récurrentes linéaires. 82m:10017
 Campbell, Paul J. (with Moeller, Christopher) Secondary Fibonacci sequences. 82j:10014
 Cavachi, Marius Some properties of the terms of the Fibonacci sequence. (Romanian) 82c:10016
 Cornish, William H. Powers of matrices and recurrence relations. 82i:10011
 DeLeon, M. J. See Bastida, Julio R., 82f:10012
 De Temple, Duane W. A new angle on the geometry of the Fibonacci numbers. 82d:10019
 Fuller, Leonard E. Solutions for general recurrence relations. 82j:10015
 Gbur, Mary E. A generalization of a problem of Stolarsky. 82b:10012
 Glass, J. P. (with Loxton, J. H.; Van der Poorten, Alfred J.) Identifying a rational function. 82m:10018
 Hillman, A. P. See Hoggatt, Verner E., Jr., 82d:10020
 Hindin, Harvey J. An alternate representation for Cesàro's Fibonacci-Lucas identity. 82j:10016

- Hoggatt, Verner E., Jr. (with Hillman, A. P.) Recursive, spectral, and self-generating sequences. **82d:10020**
 See also Silva, Anne, **82e:10018**
- Horadam, A. F. See Shannon, A. G.; et al., **82a:10014**
- Howell, John R. Some extensions of properties of the sequence of Fibonacci polynomials. **82j:10017**
- Kimberling, Clark. Fractional parts ($nr-s$), almost arithmetic sequences, and Fibonacci numbers. **82m:10019**
- Klosinski, Leonard F. See Smolarski, Dennis C., **82i:10013**
- Krishna, H. V. Identities of a generalized Fibonacci sequence. **82g:10021**
 Divisibility properties of a generalized Fibonacci sequence. **82j:10018**
- van Leeuwen, Jan. Reconsidering a problem of M. Ward. **82j:10019**
- Loh, R. P. See Shannon, A. G.; et al., **82a:10014**
- Long, Calvin T. A limited arithmetic on simple continued fractions. III. **82g:10020**
- Loxton, J. H. See Glass, J. P.; et al., **82m:10018**
- Mátyás, Ferenc. On the quotients of the elements of linear recursive sequences of second order. (Hungarian) **82m:10020**
- Mendelsohn, Paul N. The Pentanacci numbers. **82g:10022**
- Moeller, Christopher. See Campbell, Paul J., **82j:10014**
- Monzingo, M. G. An observation concerning: "Binet's formula generalized" [Fibonacci Quart. 15 (1977), no. 1, 21, 24, 29; MR 54 #12624] by A. K. Whitford. **82j:10020**
- Pollin, Jack M. (with Schoenberg, I. J.) On the matrix approach to Fibonacci numbers and the Fibonacci pseudoprimes. **82i:10013**
- Rieger, G. J. Einige Rekursionsformeln für Summen mit Binomialkoeffizienten. **82e:10017**
- Russell, David L. Sums of products of terms from linear recurrence sequences. **82j:10021**
- Schoenberg, I. J. See Pollin, Jack M., **82i:10013**
- Schram, John Michael. Recursively prime sequences. **82i:10012**
- Shannon, A. G. (with Horadam, A. F.; Loh, R. P.) Proper divisors of Lenakel numbers. **82a:10014**
- Silva, Anne (with Hoggatt, Verner E., Jr.) Generalized Fibonacci numbers. **82e:10018**
- Smolarski, Dennis C. (with Klosinski, Leonard F.) Recognition algorithms for Fibonacci numbers. **82i:10013**
- Somer, Lawrence. The divisibility properties of primary Lucas recurrences with respect to primes. **82g:10023**
- Steiner, Ray. On Fibonacci numbers of the form $x^2 + 1$. **82j:10022**
- Trout, Jacques. Solution of the recurrent equation $u_{n+1} = 2u_n - u_{n-1} + u_{n-3}$. **82g:10024**
- Van der Poorten, Alfred J. See Glass, J. P.; et al., **82m:10018**
- (Whitford, Anthony K.) See Monzingo, M. G., **82j:10020**
- Yousif, Salah M. Generation of Fibonacci numbers by digital filters. **82g:10025**

secondary classifications:

- Bange, David W. (with Barkauskas, Anthony E.; Slater, Peter J.) Fibonacci numbers in tree counts for maximal outerplane and related graphs. **(82e:05077)**
- Barkauskas, Anthony E. See Bange, David W.; et al., **(82e:05077)**
- Budgor, Aaron B. Star polygons, Pascal's triangle, and Fibonacci numbers. **(82d:05089)**
- Carlitz, L. Solution of certain recurrences. II. **(82a:05005)**
- Frei, Günther. Binary Lucas and Fibonacci polynomials. I. **(82e:10020)**
- Fuller, Leonard E. A special m th-order recurrence relation. **(82j:05012)**
- Garner, Lynn E. On the Collatz $3n+1$ algorithm. **(82j:10090)**
- Gould, H. W. A history of the Fibonacci Q -matrix and a higher-dimensional problem. **(82j:01055)**
- Gries, David (with Levin, Gary) Computing Fibonacci numbers (and similarly defined functions) in log time. **(82g:68034b)**
- Harman, C. J. Complex Fibonacci numbers. **(82h:10015)**
- Hasse, Helmut. Iterierter Differenzbetrag für 2-stellige g -adische Zahlen. (Spanish summary) **(82i:10007)**
- Kimberling, Clark. Generating functions of linear divisibility sequences. **(82d:05012)**
- Kiss, Péter. A Diophantine approximative property of the second order linear recurrences. **(82k:10034)**
- Klorys, Constantine. Fibonacci number identities from algebraic units. **(82j:15015)**
- Levin, Gary. See Gries, David, **(82g:68034b)**
- Lewin, Mordechai. Some combinatorial identities. **(82h:05021)**
- Long, Calvin T. The decimal expansion of $1/89$ and related results. **(82h:10011)**
- Morrison, David R. A Stolarsky array of Wythoff pairs. **(82j:05030)**
- Slater, Peter J. See Bange, David W.; et al., **(82e:05077)**
- Urbanek, Friedrich J. An $O(\log n)$ algorithm for computing the n th element of the solution of a difference equation. **(82g:68034a)**
- Washington, Lawrence C. Benford's law for Fibonacci and Lucas numbers. **(82f:10009)**

10A40 Special numbers, sequences and polynomials (e.g. Bernoulli)

- Barsky, Daniel (with Dumont, Dominique) Congruences pour les nombres de Genocchi de 2e espèce. **82m:10021**
- Borho, Walter. Some large primes and amicable numbers. **82d:10021**
- Brezina, Josef. On hexagonal numbers. (Czech. Russian and English summaries) **82g:10026**
- Carlitz, L. A reciprocity theorem and a three-term relation for generalized Dedekind-Rademacher sums. **82a:10015**
 Some polynomials related to the Bernoulli and Euler polynomials. **82j:10023**
- Chowla, P. (with Chowla, Sarvadaman) A note on Bernoulli numbers. **82c:10013**
 (with Chowla, Sarvadaman) On Bernoulli numbers. II. **82m:10022**
- Chowla, Sarvadaman. See Chowla, P., **82c:10013** and **82m:10022**
- Doman, B. G. S. (with Williams, J. K.) Fibonacci and Lucas polynomials. **82k:10013**
- Dumont, Dominique (with Viennot, Gérard) A combinatorial interpretation of the Seidel generation of Genocchi numbers. **82j:10024**
 See also Barsky, Daniel, **82m:10021**
- Frei, Günther. Binary Lucas and Fibonacci polynomials. I. **82e:10020**
- Furno, Anne L. Cycles of differences of integers. **82i:10014**

- Gessel, Ira M. Congruences for Bell and tangent numbers. **82f:10014**
- (Golomb, Solomon W.) See Keller, Wilfrid, **82m:10024**
- Grinstein, Louise S. Pythagorean triangles and multiple angles. **82g:10027**
- Guy, Richard K. (with Wunderlich, Marvin C.) Computing unitary aliquot sequences—a preliminary report. **82h:10012**
- Harman, C. J. Complex Fibonacci numbers. **82h:10015**
- Hindin, Harvey J. A theorem concerning heptagonal numbers. **82d:10022**
- Hirschhorn, Michael D. Infinitely many identities of Kolberg type. **82c:10014**
 (with Hunt, David C.) A simple proof of the Ramanujan conjecture for powers of 5. **82m:10023**
- Howard, F. T. A special class of Bell polynomials. **82g:10028**
- Hunt, David C. See Hirschhorn, Michael D., **82m:10023**
- Keller, Wilfrid. Table errata: "Properties of the sequence $3 \cdot 2^n + 1$ " [Math. Comp. 30 (1976), no. 135, 657–663; MR 53 #7933] by S. W. Golomb. **82m:10024**
- Lagarias, J. C. (with Odlyzko, Andrew M.) Divisibility properties of some cyclotomic sequences. **82c:10014**
 (with Weisser, D. P.) Fibonacci and Lucas cubes. **82d:10023**
- Leeming, David J. (with MacLeod, R. A.) Some properties of generalized Euler numbers. **82j:10025**
- MacLeod, R. A. See Leeming, David J., **82j:10025**
- Niederreiter, Harald. Verteilung von Resten rekursiver Folgen. **82i:10015**
- Odlyzko, Andrew M. See Lagarias, J. C., **82c:10014**
- Pajunen, Seppo. On primitive weird numbers. **82g:10029**
- Pomerance, Carl (with Selfridge, J. L.; Wagstaff, Samuel S., Jr.) The pseudoprimes to $25 \cdot 10^9$. **82g:10030**
- Radoux, Christian. Quelques propriétés arithmétiques des nombres d'Apéry. (English summary) **82g:10031**
- Selfridge, J. L. See Pomerance, Carl; et al., **82g:10030**
- Shorey, T. N. (with Stewart, C. L.) On divisors of Fermat, Fibonacci, Lucas and Lehmer numbers. II. **82m:10025**
- Stewart, C. L. See Shorey, T. N., **82m:10025**
- Surányi, János. A divisibility property concerning binomial coefficients. **82j:10026**
- Trigg, Charles W. 9 and 10 distinct digits in pentagonal numbers. **82h:10016**
- Viennot, Gérard. See Dumont, Dominique, **82j:10024**
- Wagstaff, Samuel S., Jr. See Pomerance, Carl; et al., **82g:10030**
- Weisser, D. P. See Lagarias, J. C., **82c:10014**
- Williams, J. K. See Doman, B. G. S., **82k:10013**
- Wulczyn, Gregory. A generalization of some L. Carlitz identities. **82k:10015**
- Wunderlich, Marvin C. See Guy, Richard K., **82h:10012**

secondary classifications:

- Backstrom, Robert P. On reciprocal series related to Fibonacci numbers with subscripts in arithmetic progression. **(82d:10018)**
- Barnabei, Marilena (with Brini, Andrea; Nicoletti, Giorgio) Polynomial sequences of integral type. **(82c:05016)**
- Berndt, Bruce C. (with Joshi, Padmini T.; Wilson, B. M.) Chapter 2 of Ramanujan's second notebook. **(82h:01038)**
- Brent, Richard P. (with McMillan, Edwin M.) Some new algorithms for high-precision computation of Euler's constant. **(82g:10002)**
- Brini, Andrea. See Barnabei, Marilena; et al., **(82c:05016)**
- Carlitz, L. Weighted Stirling numbers of the first and second kind. II. **(82c:05010)**
- De Temple, Duane W. A new angle on the geometry of the Fibonacci numbers. **(82d:10019)**
- Dumont, Michel (with Meus, Jean) The four-numbers game. **(82e:10010)**
- Entringer, Roger C. (with Slater, Peter J.) Gossips and telegraphs. **(82a:05025)**
- Erdős, Paul. Some extremal problems on divisibility properties of sequences of integers. **(82i:10077)**
- Garfinkel, Robert S. (with Selkow, Stanley M.) On some conjectures of Gould on the parities of the binomial coefficients. **(82j:05006)**
- Gill, John (with Miller, Gary L.) Newton's method and ratios of Fibonacci numbers. **(82h:65090)**
- Gries, David (with Levin, Gary) Computing Fibonacci numbers (and similarly defined functions) in log time. **(82g:68034b)**
- Howard, F. T. Associated Stirling numbers. **(82c:05023)**
- Joshi, Padmini T. See Berndt, Bruce C.; et al., **(82h:01038)**
- Levin, Gary. See Gries, David, **(82g:68034b)**
- McMillan, Edwin M. See Brent, Richard P., **(82g:10002)**
- Meus, Jean. See Dumont, Michel, **(82e:10010)**
- Miller, Gary L. See Gill, John, **(82h:65090)**
- Neuman, Edward. Note on Stirling numbers of the first and second kinds. (Serbo-Croatian summary) **(82m:05017)**
- Newman, Morris (with Shanks, Daniel; Williams, H. C.) Simple groups of square order and an interesting sequence of primes. **(82h:20022)**
- Nicoletti, Giorgio. See Barnabei, Marilena; et al., **(82c:05016)**
- Radoux, Christian. Calcul effectif de certains déterminants de Hankel. **(82j:05016)**
- te Riele, Herman J. J. Hyperperfect numbers with three different prime factors. **(82c:10006)**
- Roth, Arthur J. (with Sobel, Milton) A probabilistically attained set of polynomials that generate Stirling numbers of the second kind. **(82m:05005)**
- Selkow, Stanley M. See Garfinkel, Robert S., **(82j:05006)**
- Shanks, Daniel. See Newman, Morris; et al., **(82h:20022)**
- Siradzinov, S. H. Asymptotic expression for Euler numbers. (Russian) **(82g:05010)**
- Slater, Peter J. See Entringer, Roger C., **(82a:05025)**
- Sobel, Milton. See Roth, Arthur J., **(82m:05005)**
- Todorov, Pavel G. On a new explicit representation of Euler numbers. (Russian. English summary) **(82m:05006)**
- Urbanek, Friedrich J. An $O(\log n)$ algorithm for computing the n th element of the solution of a difference equation. **(82g:68034a)**
- Vogel, Curtis R. Proof that the area of a Pythagorean triangle is never a square. **(82h:51032)**

Williams, H. C. See Newman, Morris; et al., (82b:20022)
 Wilson, B. M. See Berndt, Bruce C.; et al., (82b:01038)

10A45 Partitions

Baranov, V. I. An extremal problem on partitions of numbers. (Russian) 82c:10021
 Belov, N. V. See Rau, V. G.; et al., 82c:10023 and 82c:10016
 Bressoud, David M. Extension of the partition sieve. 82c:10022
 Charla, L. M. (with Girse, Robert D.) A generalization of an Euler formula in partition theory. 82c:10015
 Cohen, Daniel I. A. PIE-sums: a combinatorial tool for partition theory. 82m:10026
 Girse, Robert D. The number of conjugacy classes of the alternating group. 82d:10024
 See also Charla, L. M., 82c:10015
 Gupta, Hansraj A direct proof of the Churchhouse conjecture concerning binary partitions. 82b:10013
 Hirschhorn, Michael D. On the residue mod 2 and mod 4 of $p(n)$. 82d:10025
 Hoggatt, Verner E., Jr. Additive partitions of the positive integers. 82f:10015
 Ijehin, V. V. See Rau, V. G.; et al., 82c:10023 and 82c:10016
 Lepowsky, James (with Wilson, Robert Lee) A new family of algebras underlying the Rogers-Ramanujan identities and generalizations. 82k:10016
 Parhomov, L. G. See Rau, V. G.; et al., 82c:10023 and 82c:10016
 Rau, V. G. (with Parhomov, L. G.; Ijehin, V. V.; Belov, N. V.) On the number of possible Patterson cyclotomic sets. (Russian) 82c:10023
 (with Parhomov, L. G.; Ijehin, V. V.; Belov, N. V.) On the calculation of Patterson cyclotomic sets. (Russian) 82c:10016
 Samsonadze, E. T. On partition functions. (Russian. Georgian and English summaries) 82c:10014
 Trigg, Charles W. The powerful 1979. 82g:10032
 Vangipuram, S. An asymptotic formula in the theory of partitions into k th powers. 82g:10033
 Wilson, Robert Lee See Lepowsky, James, 82k:10016
 Winans, Charles F. The Fibonacci series in the decimal equivalents of fractions. 82g:10034

secondary classifications:

Andrews, George E. Notes on the Dyson conjecture. (82c:33002)
 Bressoud, David M. A note on gap-frequency partitions. (82c:05013)
 On partitions, orthogonal polynomials and the expansion of certain infinite products. (82c:05021)
 Burge, William H. A correspondence between partitions related to generalizations of the Rogers-Ramanujan identities. (82c:05020)
 Gessel, Ira M. A noncommutative generalization and q -analog of the Lagrange inversion formula. (82g:05006)
 Gordon, Basil (with Houten, Lorne) Notes on plane partitions. VI. (82d:05017)
 (with Houten, Lorne) Multirowed partitions with totally distinct parts. (82c:05019)
 Gupta, Hansraj On a partition problem of Erdős. (82m:05014)
 Hirschhorn, Michael D. Infinitely many identities of Kolberg type. (82k:10014)
 (with Hunt, David C.) A simple proof of the Ramanujan conjecture for powers of 5. (82m:10023)
 Holst, Lars On numbers related to partitions of unlike objects and occupancy problems. (82m:05015)
 Houten, Lorne See Gordon, Basil, (82c:05019) and (82d:05017)
 Hunt, David C. See Hirschhorn, Michael D., (82m:10023)
 Lascoux, Alain Produit de Kronecker des représentations du groupe symétrique. (82b:20016)
 Madsen Barbosa, Ray Partitions of numbers with restricted parts 1-2-3, 1-2-4 and 1-2-5, by finite differences. (Portuguese. English summary) (82i:10001)
 Paris, J. B. Some independence results for Peano arithmetic. (82d:03095)
 Ramanathan, K. G. Ramanujan and the congruence properties of partitions. (82c:10003)
 Wright, E. M. The Tarry-Escott and the "easier" Waring problems. (82f:10059)

10A50 Combinatorial number theory

Trigg, Charles W. Antimagic pentagrams with line sums in arithmetic progression, $\Delta=3$. 82c:10017

secondary classifications:

Baxter, R. J. Exactly solved models. (82m:82006)

10A99 None of the above, but in this section

Boas, R. P. Anomalous cancellation. (See 82c:00006)
 Chen, Robert (with Zame, Alan) Fibonacci numbers and stopping times. 82f:10016
 Cohn, Harvey Growth types of Fibonacci and Markoff. 82j:10027
 Jahnke, Thomas Bemerkungen über Zulässigkeitsmengen vollständig additiver Funktionen. 82c:10024
 Saito, Sadao Some expressions for 15 and 1978. 82c:10025
 Schwarz, Stefan An unconventional problem in the elementary theory of numbers. 82c:10026
 Webb, William A. Expressing rationals as a sum of a small number of unit fractions. 82c:10016
 Yamada, Masaji A convergence proof about an integral sequence. 82d:10026
 Zame, Alan See Chen, Robert, 82f:10016
 Zenkin, A. A generalization of a theorem of G. Pall. (Russian) 82f:10017

secondary classifications:

Lewis, Ted (with Willard, Stephen) The rotating table. (82g:90088)

Willard, Stephen See Lewis, Ted, (82g:90088)

10Bxx Diophantine equations [See also 14Gxx.]

10B05 Linear, quadratic and bilinear equations

Arkin, Joseph (with Hoggatt, Verner E., Jr.; Straus, Ernst G.) On Euler's solution to a problem of Diophantus. II. 82b:10015
 Berzsenyi, George Remarks on the Diophantine equations $a^2 \pm ab + b^2 = c^2$. 82j:10028
 Chahal, Jasbir Singh Congruence properties of the solutions of Pell's equation. 82m:10027
 Chalk, J. H. H. An application of Hooley's method for counting solutions of a Diophantine equation. 82g:10035
 DeLeon, M. J. A characterization of the fundamental solutions to Pell's equation $u^2 - Dv^2 = C$. 82f:10018
 Frumkin, M. A. The number of natural solutions of a system of linear Diophantine equations. (Russian) 82d:10027
 Grunewald, Fritz J. (with Segal, Daniel) How to solve a quadratic equation in integers. 82j:10029
 Györy, Kálmán On the solutions of linear Diophantine equations in algebraic integers of bounded norm. 82c:10016
 Hadlock, E. H. (with Moore, T. O.) The lattice points of a parabola. 82c:10017
 Hoggatt, Verner E., Jr. See Arkin, Joseph; et al., 82b:10015
 Israilov, M. I. Determination of the number of solutions of linear Diophantine equations. (Russian) 82g:10036
 Determination of the number of solutions of linear Diophantine equations and their applications in the theory of invariant cubature formulas. (Russian) 82c:10027
 Kertzer, Stanley The linear Diophantine equation. 82c:10017
 Kiss, Péter A method for solving Diophantine equations. 82j:10030
 Konvalina, John A characterization of the Pythagorean triples. 82j:10031
 Kozarackaja, L. N. On systems of linear Diophantine equations with a parameter. (Russian. English summary) 82f:10019
 Leech, John Two Diophantine birds with one stone. 82c:10017
 Manley, P. L. A note on linear forms. 82d:10028
 Moore, T. O. See Hadlock, E. H., 82c:10017
 Rödseth, Øystein J. On a linear Diophantine problem of Frobenius. II. 82k:10018
 Segal, Daniel See Grunewald, Fritz J., 82j:10029
 Sinha, T. N. (with Venkaramaiah, S.) Correction: "The equation $x^2 - Py^2 = 2z^2$, P , a Mersenne prime" [Indian J. Mech. Math. 16 (1978), no. 2, 45-47; MR 81g:10030]. 82m:10028
 Straus, Ernst G. See Arkin, Joseph; et al., 82b:10015
 Teh, Oh Kian Continued fractions and linear Diophantine equations. 82a:10017
 Velupillai, Manoranjitham The equations $z^2 - 3y^2 = -2$ and $z^2 - 6x^2 = -5$. 82b:10018
 Venkaramaiah, S. See Sinha, T. N., 82m:10028

secondary classifications:

Nijenhuis, Albert A minimal-path algorithm for the "money changing problem". (82m:68070a)
 Correction to: "A minimal-path algorithm for the 'money changing problem'". (82m:68070b)
 Ren, Jian Hua See Wang, Yuan; et al., (82i:10043)
 Troun, Jacques Solution of the recurrent equation $u_{n+1} = 2u_n - u_{n-1} + u_{n-3}$. (82c:10024)
 Wang, Lian Xiang See Wang, Yuan; et al., (82i:10043)
 Wang, Yuan (with Wang, Lian Xiang; Ren, Jian Hua) A note on a transference theorem of the systems of linear congruences. (82i:10043)
 Weinberg, F. A necessary and sufficient condition for the aggregation of linear Diophantine equations. (82j:90054)

10B10 Cubic and quartic equations

Bremner, Andrew Pythagorean triangles and a quartic surface. 82a:10018
 De Groote, R. (with Hirschfeld, J. W. P.) The number of points on an elliptic cubic curve over a finite field. 82d:10029
 Hirschfeld, J. W. P. See De Groote, R., 82d:10029
 Ke, Zhao (with Sun, Qi) On the Diophantine equation $x^4 - Dy^2 = 1$. (Chinese) 82i:10018
 Mihailov, I. I. Some Diophantine equations of the third degree. (Russian. Czech summary) 82c:10018
 Mohanty, S. P. On the Diophantine equation $x^3 + y + 1 - xyz = 0$. 82c:10019
 A class of Diophantine equations. 82i:10019
 Integer solutions in arithmetic progression for $y^2 - k = x^3$. 82f:10020
 Ono, Takashi On the relative Mordell-Weil rank of elliptic quartic curves. 82d:10030
 Sansone, Giovanni The points with rational coordinates and in particular those with integer coordinates on the elliptic cubic $y^2 = x^3 - x + 1$. (Italian) 82g:10037
 Stroeker, R. J. The Diophantine equation $(x^2 + y)(x + y^2) = N(x - y)^2$. 82c:10019
 On the Diophantine equation $(2y^4 - 3)^2 = x^2(3x^2 - 2)$ in connection with the existence of nontrivial tight 4-designs. 82j:10032
 Sun, Qi See Ke, Zhao, 82i:10018
 Xeroudakes, Georgios On Pythagorean triangles. 82b:10019
 A theorem of Diophantos. 82b:10020

secondary classifications:

Chowla, Sarvadaman (with Cowles, John R.; Cowles, M.) Some problems from the study of cubic fields. (82k:12001)
 Cowles, John R. See Chowla, Sarvadaman; et al., (82k:12001)
 Cowles, M. See Chowla, Sarvadaman; et al., (82k:12001)
 Kramer, Kenneth Arithmetic of elliptic curves upon quadratic extension. (82g:14028)

10B15 Higher degree equations

Ahmad, Sarwar Naseeruddin Fermat's last theorem. 82b:10016

- Beukers, F. The generalised Ramanujan-Nagell equation. (See 82j:10003)
- Clarke, J. H. (with Shannon, A. G.) Some constraints on Fermat's last theorem. 82m:10029
- Flanigan, Francis J. On an exponential Diophantine equation in seven unknowns which reduces to the Catalan equation. 82c:10019
- Györy, Kálmán (with Tijdeman, R.; Voorhoeve, M.) On the equation $1^4 + 2^4 + \dots + x^4 = y^2$. 82c:10021
- Explicit upper bounds for the solutions of some Diophantine equations. 82e:10028
- Inkeri, K. On the unsolvability of some Diophantine equations of a modified Fermat type. 82e:10029
- Karamatsu, Yoshikazu On Fermat's last theorem and the first factor of the class number of the cyclotomic field. II. 82a:10020
- Korhonen, Olavi On the Diophantine equation $Ax^2 + 8B = y^4$. 82h:10022
- On the Diophantine equation $2Ax^2 + B = y^4$. 82i:10020
- On the Diophantine equation $Cx^2 + D = y^4$. 82i:10021
- Om, Gwan Dok On the form of positive integer solutions of the equation $x^p + y^p = z^p$. (Korean. English summary) 82b:10017
- Ribenboim, Paulo Fermat's last theorem: recent developments. 82h:10023
- Ridders, C. J. F. Fermat's last theorem. 82h:10024
- Shannon, A. G. See Clarke, J. H., 82m:10029
- Singh, Lallu The general proof of Fermat's last theorem. 82h:10018
- Stepanov, S. A. Diophantine equations over function fields. (Russian) 82a:10021
- Tanahashi, Katsumi On the Diophantine equations $x^2 + 7^m = 2^n$ and $x^2 + 11^m = 3^n$. 82j:10033
- Tijdeman, R. See Györy, Kálmán; et al., 82h:10021
- Tong, Jing Cheng A note on the number of coprime integer solutions of $y^2 = ax^3 + k$. 82m:10030
- Toyoizumi, Masao On the Diophantine equation $y^2 + D^m = 2^n$. 82m:10031
- Tzanakis, Nicholas On the integer solutions of the equations $X^3 + Y^{12} = U^6 + V^6$ and $X^3 + Y^6 = U^{12} + V^6$. 82h:10025
- Vodă, Viorel Gh. A solvable case of the equation of degree five. (Romanian) 82e:10030
- Voorhoeve, M. See Györy, Kálmán; et al., 82h:10021

secondary classifications:

- (Andreev, V.) See Edwards, Harold M., (82d:10002)
- Edwards, Harold M. Fermat's last theorem. (Bulgarian) (82d:10002)
- Mihailov, I. I. Some Diophantine equations of the third degree. (Russian. Czech summary) (82e:10018)
- Ogai, S. V. Rational points on algebraic curves. (Russian) (82j:14029)
- Shanks, Daniel (with Williams, H. C.) Gundersen's function in Fermat's last theorem. (82g:10004)
- Williams, H. C. See Shanks, Daniel, (82g:10004)

10B16 Norm form equations

- Györy, Kálmán (with Pethő, A.) Über die Verteilung der Lösungen von Normformen Gleichungen. III. 82e:10031
- Sur certaines généralisations de l'équation de Thue-Mahler. 82e:10032
- Matveev, E. M. Some Diophantine equations with a large number of variables. (Russian. English summary) 82h:10026
- Some Diophantine equations with an effective boundary for the modulus of solutions. (Russian. English summary) 82e:10033
- Effective estimate of some polynomials with several variables. (Russian. English summary) 82e:10034
- Pethő, A. See Györy, Kálmán, 82e:10031

secondary classifications:

- Györy, Kálmán On the solutions of linear Diophantine equations in algebraic integers of bounded norm. (82c:10016)

10B20 Multiplicative equations

10B25 Nonpolynomial equations

- Agrawal, M. K. See Parnami, J. C.; et al., 82j:10034
- Kordemskii, B. A. An inductive search for solutions to a curious equation. (Russian) 82i:10022
- Parnami, J. C. (with Agrawal, M. K.; Rajwade, A. R.) On some trigonometric Diophantine equations of the type $\sqrt{n} = c_1 \cos \pi d_1 + \dots + c_\lambda \cos \pi d_\lambda$. 82j:10034
- Rajwade, A. R. See Parnami, J. C.; et al., 82j:10034

secondary classifications:

- Györy, Kálmán (with Tijdeman, R.; Voorhoeve, M.) On the equation $1^4 + 2^4 + \dots + x^4 = y^2$. (82h:10021)
- Knoebel, R. Arthur Exponentials reiterated. (82e:26004)
- Tijdeman, R. See Györy, Kálmán; et al., (82h:10021)
- Voorhoeve, M. See Györy, Kálmán; et al., (82h:10021)

10B30 Equations in sufficiently many variables [See also 10J10.]

- Arhipov, G. I. (with Karacuba, A. A.; Čubarikov, V. N.) On a system of Diophantine equations. (Russian) 82a:10022
- Čubarikov, V. N. See Arhipov, G. I.; et al., 82a:10022
- Karacuba, A. A. See Arhipov, G. I.; et al., 82a:10022
- Louck, J. D. (with Metropolis, N.) Number-theoretic degeneracy of the energy levels of a perturbed N -dimensional isotropic harmonic oscillator. 82m:10032
- Metropolis, N. See Louck, J. D., 82m:10032

secondary classifications:

- Ismatullayev, Š. A. Asymptotic behavior of the number of solutions of a Diophantine equation. (Russian) (82i:10072)

10B35 Representation problems [See also 10J10.]

- Dade, Everett C. An acknowledgement of priority. 82m:10033
- Iwaniec, Henryk On sums of two norms from cubic fields. 82g:10038
- Plaksin, V. A. Representation of numbers by the sum of four squares of integers, two of which are prime numbers. (Russian) 82h:10027
- Rødseth, Øystein J. On h -bases for n . 82m:10034
- Sorenson, Peter Sums of two integral squares in certain cyclotomic number fields. I. 82j:10035

secondary classifications:

- Agrawal, M. K. See Parnami, J. C.; et al., (82j:10034)
- Aldarova, L. K. Representation of almost all numbers in the form of a sum of a prime and a given polynomial. (Russian) (82k:10065)
- Bredihin, B. M. (with Grišina, T. I.) The smoothing method in problems of Waring type. (Russian) (82j:10079)
- Chalk, J. H. H. An application of Hookey's method for counting solutions of a Diophantine equation. (82g:10035)
- Cohn, Harvey The explicit Hilbert 2-cyclic class field for $\mathbb{Q}(\sqrt{-p})$. (82e:12011)
- Grišina, T. I. See Bredihin, B. M., (82j:10079)
- Hayashi, Elmer K. Omega theorems for the iterated additive convolution of a nonnegative arithmetic function. (82k:10067)
- Parnami, J. C. (with Agrawal, M. K.; Rajwade, A. R.) On some trigonometric Diophantine equations of the type $\sqrt{n} = c_1 \cos \pi d_1 + \dots + c_\lambda \cos \pi d_\lambda$. (82j:10034)
- Rajwade, A. R. See Parnami, J. C.; et al., (82j:10034)
- Rieger, G. J. Über Folgen gebrochener Potenzen. (82d:10060)
- Samsomadze, E. T. On partition functions. (Russian. Georgian and English summaries) (82h:10014)

10B40 p -adic and power series fields

- Stevenson, Edith On the representation of integers by p -adic diagonal forms. 82h:10019

10B45 Diophantine inequalities

- Bykovskii, V. A. Systems of inequalities. (Russian. English summary) 82k:10020
- Schwarz, Wolfgang Survey on analogues of the Waring problem: Diophantine inequalities. 82g:10039

secondary classifications:

- Hačijan, L. G. See Tarasov, S. P., (82f:68052)
- Nikšić, E. M. A property of Taylor coefficients. (Russian) (82e:10063)
- Schmidt, Wolfgang M. Diophantine inequalities for forms of odd degree. (82h:10033)
- Tarasov, S. P. (with Hačijan, L. G.) Boundaries of solutions and algorithmic complexity of systems of convex Diophantine inequalities. (Russian) (82f:68052)

10B99 None of the above, but in this section

- Tijdeman, R. Solvability of Diophantine equations. 82j:10036

secondary classifications:

- Webb, William A. Expressing rationals as a sum of a small number of unit fractions. (82a:10016)

10Cxx Forms (especially quadratic) (For quadratic forms in linear algebra, see 15A63.)

10C01 Forms over general fields (especially quadratic)

- Arason, Jón Kr. Der Witttring projektiver Räume. 82f:10021
- Błaszczak-Switekiewicz, Bronisława The u -invariant of fields with weak linkage property. (Polish summary) 82b:10020
- Colliot-Thélène, Jean-Louis Formes quadratiques multiplicatives et variétés algébriques: deux compléments. (German summary) 82g:10040
- Fowler, G. O. The existence of linear factors in the direct sum of forms and in the tensor product of forms. 82d:10031
- Kula, Mieczysław Finite sets of quasi-orderings. (Polish summary) 82f:10022
- Shadek, Andrzej Abstract theory of quadratic forms. (Polish summary) 82f:10023
- Stability in the abstract theory of quadratic forms. (Polish summary) 82f:10024

secondary classifications:

- Hesslink, Wim H. Nilpotency in classical groups over a field of characteristic 2. (82d:14030)
- Knebusch, Manfred (with Scharlau, Winfried) ★Algebraic theory of quadratic forms. (82h:10023)
- (Lee, Heisook) See Knebusch, Manfred; et al., (82h:10023)
- Marshall, Murray (with Yucas, Joseph) Linked quaternionic mappings and their associated Witt rings. (82m:10037)
- Scharlau, Winfried See Knebusch, Manfred, (82h:10023)
- Yucas, Joseph See Marshall, Murray, (82m:10037)

10C02 Forms over global rings and fields (especially quadratic)

- Coray, Daniel F. On a problem of Pfister about intersections of three quadrics. 82h:10021

- Craven, Thomas C. Orderings of higher level and semilocal rings. **82h:10028**
 Earnest, A. G. Congruence conditions on integers represented by ternary quadratic forms. **82d:10032**
 Kitahara, Yoshiyuki Tensor products of positive definite quadratic forms. III. **82h:10029**
 Tensor products of positive definite quadratic forms. IV. **82m:10035**
 Tensor products of positive definite quadratic forms. V. **82m:10036**
 Li, Shuo-Yen Robert See Li, Wen Ch'ing Winnie, **82d:10033**
 Li, Wen Ch'ing Winnie (with Li, Shuo-Yen Robert) On generators of ideals associated with unions of linear varieties. **82d:10033**
 Libgober, Anatoly Levine's formula in knot theory and quadratic reciprocity law. **82c:10021**
 Mimura, Yoshio On 2-lattices in an Hermitian space. **82h:10030**
 Parimala, Raman Quadratic forms over polynomial rings over Dedekind domains. **82g:10041**
 Riehm, C. Jordan splittings of almost unimodular integral quadratic forms. **82g:10042**
 Riss, Jean La composition des formes quadratiques binaires (d'après Gauss). **82h:10022**
 Schulze-Pillot, Rainer Remark on a note of Hsia about classification of unimodular lattices. **82h:10025**

secondary classifications:

- Colliot-Thélène, Jean-Louis (with Coray, Daniel F.; Sansuc, Jean-Jacques) Descente et principe de Hasse pour certaines variétés rationnelles. **(82i:14020)**
 Coray, Daniel F. See Colliot-Thélène, Jean-Louis; et al., **(82i:14020)**
 Jacob, Bill The model theory of "*R*-formal" fields. **(82h:03068)**
 Kiehne, Ursel Cubic forms over the unramified hull of the maximal abelian extension of the rationals. **(82a:10025)**
 Kneser, Martin Erzeugung ganzzahliger orthogonaler Gruppen durch Spiegelungen. **(82i:10026)**
 Sansuc, Jean-Jacques See Colliot-Thélène, Jean-Louis; et al., **(82i:14020)**
 Tahtadjan, L. A. Asymptotic formula for the sum of the lengths of the periods of the quadratic irrationalities of discriminant *D*. (Russian. English summary) **(82d:10047)**

10C03 Forms over local rings and fields (especially quadratic)

- Mimura, Yoshio On orthogonal groups over the integers of a nondyadic local field. **82c:10022**
 Schuur, Susan E. On systems of three quadratic forms. **82d:10034**

secondary classifications:

- Ishibashi, Hiroyuki Simple coefficient extensions of symplectic groups. **(82f:20073)**
 Kiehne, Ursel Cubic forms over the unramified hull of the maximal abelian extension of the rationals. **(82a:10025)**

10C04 Forms over real fields

- Brown, Ron (with Marshall, Murray) The reduced theory of quadratic forms. **82j:10037**
 Kula, Mirosław Fields with nontrivial Kaplansky's radical and finite square class number. **82k:10031**
 Marshall, Murray See Brown, Ron, **82j:10037**
 Śliwot, Marian On positive definite rational functions over a real closed field. (Polish summary) **82c:10020**

secondary classifications:

- Becker, Eberhard Local global theorems for diagonal forms of higher degree. **(82c:10024)**
 Delfs, Hans (with Knebusch, Manfred) Semialgebraic topology over a real closed field. I. Paths and components in the set of rational points of an algebraic variety. **(82m:14010)**
 Knebusch, Manfred See Delfs, Hans, **(82m:14010)**
 Prestel, Alexander Sums of squares over fields. **(82a:12014)**
 Riehm, C. The automorphism group of a composition of quadratic forms. **(82m:10038)**
 Szczepanik, Lucyna Quadratic forms over quadratic extensions of some fields. (Polish summary) **(82c:12018)**

10C05 Quadratic, bilinear and Hermitian forms [See also 10E25], general theory (including Witt rings of quadratic forms)

- Berman, Lawrence Quadratic forms and power series fields. **82c:10021**
 Blaszczyk-Świątkiewicz, Bronisława The *u*-invariant of fields with 16 and 32 square classes. II. (Polish summary) **82a:10023b**
 The *u*-invariant of fields with 16 and 32 square classes. I. **82a:10023a**
 Brown, Ron Powers of the augmentation ideal in the Witt ring of a field. **82h:10023**
 Chalk, J. H. H. Units of indefinite quaternion algebras. **82d:10035**
 Chowla, Sarvadaman (with Cowles, John R.; Cowles, M.) On the number of conjugacy classes in $SL(2, \mathbb{Z})$. **82c:10035**
 Cowles, John R. See Chowla, Sarvadaman; et al., **82c:10035**
 Cowles, M. See Chowla, Sarvadaman; et al., **82c:10035**
 Hashimoto, Ki-ichiro (with Ibukiyama, Tomoyoshi) On class numbers of positive definite binary quaternion Hermitian forms. **82j:10038**
 Ibukiyama, Tomoyoshi See Hashimoto, Ki-ichiro, **82j:10038**
 Kaplan, Pierre (with Williams, Kenneth S.) An Artin character and representations of primes by binary quadratic forms. **82d:10036**
 Kirkwood, B. H. (with McDonald, B. R.) The Witt ring of a full ring. **82a:10024**
 Kleinstein, Jerrold L. (with Rosenberg, Alex) Succinct and representational Witt rings. **82h:10024**
 Knebusch, Manfred (with Scharlau, Winfried) ★Algebraic theory of quadratic forms. **82h:10023**
 Kosaki, Kōtaro On the acyclicity of Witt ring functor. **82c:10036**
 (Lee, Heisook) See Knebusch, Manfred; et al., **82h:10023**

- Mahé, Louis Séparation des composantes réelles par les signatures d'espaces quadratiques. (English summary) **82c:10037**
 Marshall, Murray (with Yucas, Joseph) Linked quaternionic mappings and their associated Witt rings. **82m:10037**
 McDonald, B. R. See Kirkwood, B. H., **82a:10024**
 Reyov, Philippe Remarques sur la forme trace. [Remarks on the trace form] **82k:10023**
 Riehm, C. The automorphism group of a composition of quadratic forms. **82m:10038**
 Rosenberg, Alex See Kleinstein, Jerrold L., **82h:10024**
 Scharlau, Winfried See Knebusch, Manfred, **82h:10023**
 Szczepanik, Lucyna On WR-equivalence of quadratic extensions of WR-equivalent fields. (Polish summary) **82c:10023**
 Szymiczek, Kazimierz On GR-equivalence of fields. (Polish summary) **82c:10022**
 Watson, G. L. Acknowledgement: "Determination of a binary quadratic form by its values at integer points" [Mathematika **26** (1979), no. 1, 72–75; MR **81c:10019**]. **82d:10037**
 Williams, Kenneth S. See Kaplan, Pierre, **82d:10036**
 Yucas, Joseph See Marshall, Murray, **82m:10037**
 Zmud', È. M. An invariant of quadratic forms over a Galois field of characteristic 2. (Russian) **82h:10032**

secondary classifications:

- Bak, Anthony (with Kolster, Manfred) The computation of odd-dimensional projective surgery groups of finite groups. **(82j:57032)**
 Carlsson, Gunnar (with Milgram, R. James) Some exact sequences in the theory of Hermitian forms. **(82h:18016)**
 Davison, T. M. K. On Gleason's definition of quadratic forms. **(82h:15030)**
 Delfs, Hans (with Knebusch, Manfred) Semialgebraic topology over a real closed field. I. Paths and components in the set of rational points of an algebraic variety. **(82m:14010)**
 Ebeling, Wolfgang Quadratische Formen und Monodromiegruppen von Singularitäten. **(82j:14003)**
 Feig, Ephraim On systems of bilinear forms whose minimal division-free algorithms are all bilinear. **(82k:10003)**
 Grunewald, Fritz J. (with Segal, Daniel) Some general algorithms. I. Arithmetic groups. **(82d:20048a)**
 (with Segal, Daniel) Some general algorithms. II. Nilpotent groups. **(82d:20048b)**
 Jacob, Bill On the structure of Pythagorean fields. **(82g:12020)**
 Fans, real valuations, and hereditarily-Pythagorean fields. **(82j:12023)**
 Ja' Ja', Joseph On the complexity of bilinear forms with commutativity. **(82f:68049)**
 Karoubi, Max Le théorème fondamental de la *K*-théorie hermitienne. **(82h:18010)**
 Théorie de Quillen et homologie du groupe orthogonal. **(82h:18011)**
 Keller, Hans A. On the lattice of all closed subspaces of a Hermitian space. **(82j:46029)**
 Kirkwood, B. H. See McDonald, B. R., **(82h:10035)**
 Kleinstein, Jerrold L. (with Rosenberg, Alex) Witt rings of higher level. **(82h:10025)**
 Knebusch, Manfred See Delfs, Hans, **(82m:14010)**
 Kolster, Manfred See Bak, Anthony, **(82j:57032)**
 Körner, Otto Über Anzahlmatrizen von Quaternionenordnungen und quadratischen Formen. **(82h:12015)**
 Mal'cev, A. V. On the application of the discrete ergodic method in analytic arithmetic of indefinite ternary quadratic forms. (Russian) **(82h:10024)**
 McDonald, B. R. (with Kirkwood, B. H.) The orthogonal and the special orthogonal groups over a full ring. **(82h:10035)**
 Milgram, R. James See Carlsson, Gunnar, **(82h:18016)**
 Ochoa, J. An elementary model for the classes of ideals of an algebraic torus. (Spanish) **(82f:15012a)**
 An elementary model for the classes of ideals of an algebraic torus. II. (Spanish) **(82f:15012b)**
 Pronin, L. N. Automorphisms of positive binary Hermitian forms over a ring of integral quaternions. (Russian) **(82h:10046)**
 Quebbemann, Heinz-Georg (with Scharlau, Winfried; Schulte, M.) Quadratic and Hermitian forms in additive and abelian categories. **(82d:18015)**
 Zur Klassifikation unimodularer Gitter mit Isometrie von Primzahlordnung. **(82m:10039)**
 Raman, Parimala (with Sridharan, R.) Quadratic forms over rings of dimension 1. **(82i:13012)**
 Riehm, C. Jordan splittings of almost unimodular integral quadratic forms. **(82g:10042)**
 Riss, Jean La composition des formes quadratiques binaires (d'après Gauss). **(82h:10022)**
 Rosenberg, Alex See Kleinstein, Jerrold L., **(82h:10025)**
 Scharlau, Winfried See Quebbemann, Heinz-Georg; et al., **(82d:18015)**
 Schulte, M. See Quebbemann, Heinz-Georg; et al., **(82d:18015)**
 Segal, Daniel See Grunewald, Fritz J., **(82d:20048)**
 Sridharan, R. See Raman, Parimala, **(82i:13012)**
 Taussky, Olga Composition of binary integral quadratic forms via integral 2×2 matrices and composition of matrix classes. **(82m:15030)**

10C07 Class numbers of quadratic and Hermitian forms

- Quebbemann, Heinz-Georg Zur Klassifikation unimodularer Gitter mit Isometrie von Primzahlordnung. **82m:10039**
 Schulze-Pillot, Rainer Darstellung durch Spinorgeschlechter ternärer quadratischer Formen. (English summary) **82k:10024**

10C10 Higher degree forms

- Becker, Eberhard Local global theorems for diagonal forms of higher degree. **82c:10024**
 Kiehne, Ursel Cubic forms over the unramified hull of the maximal abelian extension of the rationals. **82a:10025**
 Kleinstein, Jerrold L. (with Rosenberg, Alex) Witt rings of higher level. **82h:10025**
 Rosenberg, Alex See Kleinstein, Jerrold L., **82h:10025**

Schmidt, Wolfgang M. Diophantine inequalities for forms of odd degree. 82h:10033

secondary classifications:

- Abiko, Tadayuki Classification of cubic forms with three variables. (82j:14039)
 Bölling, Reinhard Über einen Homomorphismus der rationalen Punkte elliptischer Kurven. (82d:12002)
 Györy, Kálmán Explicit upper bounds for the solutions of some Diophantine equations. (82e:10028)
 Prószyński, A. m -applications over finite fields. (82k:13014)
 Rollero, Aldo Some remarks on certain invariants of a binary quartic form. (Italian. English and French summaries) (82d:14002)
 Swinnerton-Dyer, H. P. F. Universal equivalence for cubic surfaces over finite and local fields. (82k:14019)

10C15 Analytic theory (Epstein's zeta function; relations with automorphic forms and functions)

- Mal'šev, A. V. On the application of the discrete ergodic method in analytic arithmetic of indefinite ternary quadratic forms. (Russian) 82b:10024
 Odlyzko, Andrew M. (with Sloane, N. J. A.) On exceptions of integral quadratic forms. 82j:10025
 Šavgulidze, K. Š. Cusp and quadratic forms of type $(-4, q, 1)$. (Russian. Georgian and English summaries) 82m:10040
 Sloane, N. J. A. See Odlyzko, Andrew M., 82b:10025
 Sulakvelidze, L. A. Representation of numbers by positive ternary quadratic forms. I. (Russian. Georgian and English summaries) 82j:10039a
 Representation of numbers by positive ternary quadratic forms. II. (Russian. Georgian and English summaries) 82j:10039b
 Tašpulatov, B. Finiteness of the number of classes of positive primitive quadratic forms of Jacobi, Jacobi-Gauss and Liouville type. (Russian) 82g:10043
 Waldspurger, J. L. Formes quadratiques à 4 variables et relèvement. 82a:10027

secondary classifications:

- Carlsson, Renate (with Johannsen, Wilfried) Der Multiplikator von Thetareihen höheren Grades zu quadratischen Formen ungerader Ordnung. (82e:10032)
 Eichler, Martin On symmetric and unsymmetric theta functions over a real quadratic field. (82e:10032)
 Freitag, Eberhard Thetareihen mit harmonischen Koeffizienten zur Siegelschen Modulgruppe. (82a:10029)
 Grotz, Wolfgang Einige Anwendungen der Siegelschen Summenformel. (82e:10080)
 Johannsen, Wilfried See Carlsson, Renate, (82e:10032)
 Lai, K. F. Tamagawa number of reductive algebraic groups. (82d:20043)
 Ponomarev, Paul The Doi-Naganuma lifting of quaternary theta series. (82j:10050)
 Raghavan, Srinivasacharya (with Rangachari, S. S.) Poisson formulae of Hecke type. (82m:12011)
 Estimates of coefficients of modular forms and generalized modular relations. (82j:10048)
 Rangachari, S. S. See Raghavan, Srinivasacharya, (82m:12011)
 Šušbaev, S. Š. Extrema of five-dimensional Epstein zeta functions. (Russian) (82d:10058)
 Tahtadžjan, L. A. See Vinogradov, A. I., (82b:10050)
 Terras, Audrey Integral formulas and integral tests for series of positive matrices. (82g:10047)
 Vinogradov, A. I. (with Tahtadžjan, L. A.) On analogues of the Gauss-Vinogradov formula. (Russian) (82b:10050)

10C20 p -adic theory

Schmidt, Wolfgang M. Simultaneous p -adic zeros of quadratic forms. 82b:10026

10C25 Minima of forms [See also 10E20.]

secondary classifications:

- Dumir, V. C. (with Hans-Gill, R. J.) Positive values of nonhomogeneous quaternary quadratic forms. (82h:10043)
 Hans-Gill, R. J. See Dumir, V. C., (82h:10043)
 Raka, Madhu The inhomogeneous minimum of quadratic forms of signature ± 1 . (82h:10045)
 Woods, A. C. The asymmetric product of three homogeneous linear forms. (82k:10032)

10C30 Arithmetic properties of classical groups [See also 20Gxx.]

- Dani, S. G. (with Raghavan, Srinivasacharya) Orbits of Euclidean frames under discrete linear groups. 82j:10040
 Derr, J. B. Stabilizers of nondegenerate subspaces in classical groups. 82e:10038
 Humphreys, James E. ★Arithmetic groups. 82j:10041
 Ishibashi, Hiroyuki Generators of orthogonal groups over valuation rings. 82j:10025
 Generators of $Sp_n(V)$ over a quasisemilocal semiregular ring. 82j:10042
 James, D. G. (with Weisfeiler, Boris) On the geometry of unitary groups. 82e:10039
 Projective geometry for orthogonal groups. 82e:10025
 King, Oliver Maximal subgroups of the classical groups associated with nonisotropic subspaces of a vector space. 82m:10041
 Kirkwood, B. H. See McDonald, B. R., 82h:10035
 Kneser, Martin Erzeugung ganzzahliger orthogonaler Gruppen durch Spiegelungen. 82i:10026
 Liehl, Bernhard On the group SL_2 over orders of arithmetic type. 82h:10034
 McDonald, B. R. (with Kirkwood, B. H.) The orthogonal and the special orthogonal groups over a full ring. 82h:10035
 Raghavan, Srinivasacharya See Dani, S. G., 82j:10040

Serežkin, V. N. Subgroups of symplectic groups that are rich in transvections. (Russian. English summary) 82j:10043

(Wang, Yang Xian) See Zhang, Hai Quan, 82h:10036

Weisfeiler, Boris See James, D. G., 82e:10039

Zhang, Hai Quan Comment on: "A new definition of spinor norm" [Acta Math. Sinica 16 (1966), 411–424; translated as Chinese Math.—Acta 8 (1966), 433–447; MR 34 #4370] by Y. H. Wang. (Chinese) 82h:10036

secondary classifications:

- Bartels, Hans-Jochen Zur Arithmetik von Konjugationsklassen in algebraischen Gruppen. (82j:12019)
 Bondarenko, A. A. See Platonov, V. P.; et al., (82k:20074)
 Černousov, V. I. On the rationality of spinor varieties over the rational number field. (Russian. English summary) (82m:14009)
 Chalk, J. H. H. Units of indefinite quaternion algebras. (82d:10035)
 Curtis, Charles W. (with Reiner, Irving) ★Methods of representation theory. Vol. I. (82i:20001)
 Derr, J. B. Stabilizers of isotropic subspaces in classical groups. (82e:20003)
 Dybkova, E. V. See Vavilov, N. A., (82h:20054)
 Ishibashi, Hiroyuki Simple coefficient extensions of symplectic groups. (82f:20073)
 King, Oliver On some maximal subgroups of the classical groups. (82e:20055)
 Kiriljuk, O. A. (with Rud'ko, V. P.) On finite irreducible solvable subgroups of group $GL(p, \mathbb{Z})$. (Russian. English summary) (82a:20052)
 Kirkwood, B. H. (with McDonald, B. R.) The symplectic group over a ring with one in its stable range. (82i:20062)
 McDonald, B. R. See Kirkwood, B. H., (82i:20062)
 Mimura, Yoshio On orthogonal groups over the integers of a nondyadic local field. (82k:10022)
 Nikulin, V. V. On the arithmetic groups generated by reflections in Lobačevskii spaces. (Russian) (82m:57029)
 Pierce, Stephen Maximal subgroups of the orthogonal group. (82m:20049)
 Platonov, V. P. (with Bondarenko, A. A.; Rapinčuk, A. S.) Numbers and groups of classes of algebraic groups. (Russian) (82k:20074)
 Plotkin, E. B. Parabolic subgroups in ${}^3D_4(R)$. (Russian) (82i:20054)
 Rapinčuk, A. S. See Platonov, V. P.; et al., (82k:20074)
 Reiner, Irving See Curtis, Charles W., (82i:20001)
 Rohlf, J. Maximal arithmetically defined groups and related group schemes. (82a:22012)
 Rud'ko, V. P. See Kiriljuk, O. A., (82a:20052)
 Sosnovskii, Ju. V. Isomorphisms of symplectic groups over division rings of characteristic not equal to 2. (Russian) (82m:20052)
 Vavilov, N. A. (with Dybkova, E. V.) Subgroups of the general symplectic group containing the group of diagonal matrices. (Russian) (82h:20054)
 On subgroups of the general linear group over a semilocal ring containing a group of diagonal matrices. (Russian. English summary) (82g:20073)

10C99 None of the above, but in this section

10Dxx Theory of automorphic and modular functions and forms [See also 12A67, 12B27, 14Gxx, 14Kxx, 22E50, 22E55, 30F35, 32Nxx; for relations with quadratic forms, see 10C15.]

10D05 Modular and automorphic functions

- Čibrikova, L. I. (with Sil'vestrov, V. V.) Calculation of the genus and the Weierstrass points of a fundamental polygon of a functional group. (Russian) 82f:10026
 Mahler, Kurt On a special nonlinear functional equation. 82m:10042
 Nicholls, Peter J. (with Sons, L. R.) Automorphic functions with gap power series. 82j:10044
 Ogg, A. P. Modular functions. 82h:10037
 Rück, Hans-Georg Diskriminanten zu singulären Werten von j . 82f:10027
 Sil'vestrov, V. V. See Čibrikova, L. I., 82f:10026
 Sons, L. R. See Nicholls, Peter J., 82j:10044

secondary classifications:

- Fong, Paul Characters arising in the Monster-modular connection. (82a:20029)
 Köhler, Günter On Hsiao's conjecture on Hecke groups. (82h:10038)
 Queen, Larissa Modular functions and finite simple groups. (82g:20042)
 Radoux, Christian Quelques propriétés arithmétiques des nombres d'Apéry. (English summary) (82g:10031)

10D07 Structure of modular groups and generalizations, arithmetic groups [See also 20H05, 20H10, 22E40.]

- Brooks, Robert (with Matelski, J. Peter) The dynamics of 2-generator subgroups of $PSL(2, \mathbb{C})$. 82j:10045
 Grunewald, Fritz J. (with Schwermer, Joachim) Arithmetic quotients of hyperbolic 3-space, cusp forms and link complements. 82j:10046
 (with Schwermer, Joachim) Free nonabelian quotients of SL_2 over orders of imaginary quadratic numberfields. 82i:10027
 Kirchheimer, Franz Über explizite Präsentationen Hilbertscher Modulgruppen zu totalreellen Körpern der Klassenzahl eins. 82j:10047
 Köhler, Günter On Hsiao's conjecture on Hecke groups. 82h:10038
 Matelski, J. Peter See Brooks, Robert, 82j:10045
 Rosenberger, Gerhard Über Tschebyscheff-Polynome, Nicht-Kongruenzuntergruppen der Modulgruppe und Fibonacci-Zahlen. 82a:10026
 Schwermer, Joachim See Grunewald, Fritz J., 82i:10027 and 82j:10046

- Stothers, W. W. On a result of Petersson concerning the modular group. **82c:10026**
 Ts'ao, Liang Chi A note on the cofinal problem for Hilbert modular groups. **82f:10028**
 Tuler, Randy Subgroups of $SL_2\mathbb{Z}$ generated by elementary matrices. **82k:10026**

secondary classifications:

- Abu Osman, M. T. (with Rosenberger, Gerhard) Embedding property of surface groups. **(82a:20054)**
 Appelgate, Harry (with Onishi, Hironori) Continued fractions and the conjugacy problem in $SL_2(\mathbb{Z})$. **(82i:20052)**
 Beardon, A. F. Canonical generators of Fuchsian groups. **(82h:30051)**
 (with Waterman, P. L.) Strongly discrete subgroups of $SL_2(\mathbb{C})$. **(82i:30065)**
 Cohn, Harvey Minimal geodesics on Fricke's torus-covering. **(82i:10033)**
 Doyle, Courtney (with James, David A.) Discreteness criteria and high order generators for subgroups of $SL_2(\mathbb{R})$. **(82e:22028)**
 Fine, Benjamin Congruence subgroups of the Picard group. **(82d:20044)**
 Griffiths, H. B. The topography of 2×2 real matrices. I. **(82k:57025a)**
 The topography of 2×2 real matrices. II. **(82k:57025b)**
 The topography of 2×2 real matrices. III. **(82k:57025c)**
 Grosswald, Emil On Burgess' bound for primitive roots modulo primes and an application to $\Gamma(p)$. **(82k:10059)**
 Grunewald, Fritz J. See Mennicke, J. L., **(82f:57009)**
 James, David A. See Doyle, Courtney, **(82e:22028)**
 Kirchheimer, Franz (with Wolfart, Jürgen) Explizite Präsentation gewisser Hilbertscher Modulgruppen durch Erzeugende und Relationen. (English summary) **(82i:10034)**
 Mennicke, J. L. (with Grunewald, Fritz J.) Some 3-manifolds arising from $PSL_2(\mathbb{Z}[i])$. **(82f:57009)**
 Onishi, Hironori See Appelgate, Harry, **(82i:20052)**
 Rosenberger, Gerhard See Abu Osman, M. T., **(82a:20054)**
 Stothers, W. W. Subgroups of finite index in a free product with amalgamated subgroup. **(82e:20036)**
 Thompson, John G. A finiteness theorem for subgroups of $PSL_2(\mathbb{R})$ which are commensurable with $PSL_2(\mathbb{Z})$. **(82h:20067)**
 Tuler, Randy Arithmetic sums that determine linear characters on $\Gamma(N)$. **(82d:10055)**
 Wason, Judith C. On infinite Nielsen kernels. **(82i:30063)**
 Waterman, P. L. See Beardon, A. F., **(82i:30065)**
 Wolfart, Jürgen See Kirchheimer, Franz, **(82i:10034)**

10D12 Modular forms, one variable

- Allan, Nelo Modular forms and Hecke algebras. (Portuguese) **82b:10027**
 Eichler, Martin Über die Darstellung von Modulformen durch Theta-Reihen. **82f:10030**
 Hida, Haruzo Congruence of cusp forms and special values of their zeta functions. **82g:10044**
 Kac, Victor G. (with Peterson, Dale H.) Affine Lie algebras and Hecke modular forms. **82b:10028**
 Kadota, Yoshiji On periods of cusp forms. **82f:10031**
 Kenku, M. A. Corrigendum: "The modular curve $X_0(169)$ and rational isogeny" [J. London Math. Soc. (2) 22 (1980), no. 2, 239–244; MR 81m:10048]. **82h:10039**
 Kulle, Rolf-Dieter Zum Basisproblem in der Theorie der Modulformen. **82c:10027**
 Li, Jing Hui A conjecture about elliptic curves. (Chinese) **82d:10039**
 Peterson, Dale H. See Kac, Victor G., **82b:10028**
 Raghavan, Srinivasacharya Estimates of coefficients of modular forms and generalized modular relations. **82j:10048**
 Saito, Hiroshi On a decomposition of spaces of cusp forms and trace formula of Hecke operators. **82c:10028**
 Smith, Robert Arnold The L^2 -norm of Maass wave functions. **82f:10029**
 Sokurov, V. V. Shimura integrals of cusp forms. (Russian) **82b:10029**
 Vignères, Marie-France Valeur au centre de symétrie des fonctions L associées aux formes modulaires. [The value at the center of symmetry of the L functions associated to modular forms] (See **82j:10040**)
 Walker, P. L. The Mellin transform of the partial fraction expansion for $\theta(x)$. **82i:10028**
 Weintraub, Steven H. $PSL_2(\mathbb{Z}_p)$ and the Atiyah-Bott fixed-point theorem. **82c:10029**
 Yu, Jing A cuspidal class number formula for the modular curves $X_1(N)$. **82b:10030**

secondary classifications:

- Conway, J. H. Monsters and moonshine. **(82a:20028)**
 Elliott, Peter D. T. A. Multiplicative functions and Ramanujan's τ -function. **(82h:10058)**
 Good, Anton Cusp forms and eigenfunctions of the Laplacian. **(82i:10029)**
 Hà Huy Khoái Sur une conjecture de Mazur et Swinnerton-Dyer. (English summary) **(82i:12015)**
 Hatada, Kazuyuki Congruences for eigenvalues of Hecke operators on $SL_2(\mathbb{Z})$. **(82m:10048)**
 Huber, Heinz On the spectrum of the Laplace operator on compact Riemann surfaces. **(82a:59051)**
 Kojima, Hisashi Siegel modular cusp forms of degree two. **(82f:10034)**
 (Mazur, Barry) See Serre, Jean-Pierre, **(82i:14049)**
 Novikov, A. P. The Kronecker limit formula in a real quadratic field. (Russian) **(82c:12010)**
 Odlyzko, Andrew M. (with Sloane, N. J. A.) On exceptions of integral quadratic forms. **(82i:10025)**
 Pančičkin, A. A. Dirichlet series connected with modular forms of integral and half-integral weight. (Russian) **(82a:10031)**
 Serre, Jean-Pierre Points rationnels des courbes modulaires $X_0(N)$ [d'après Barry Mazur]. **(82i:14049)**
 Sloane, N. J. A. See Odlyzko, Andrew M., **(82i:10025)**
 Sturm, Jacob Special values of zeta functions, and Eisenstein series of half integral weight. **(82b:10033a)**
 Addendum to: "Special values of zeta functions, and Eisenstein series of half integral weight" [Amer. J. Math. 102 (1980), no. 2, 219–240]. **(82b:10033b)**

10D15 Automorphic forms, one variable

- Cohen, Henri Hypothèse de Riemann et formes automorphes de Maass. **82c:10030**
 Elstrodt, J. Die Selbergsche Spurformel für kompakte Riemannsche Flächen. **82m:10043**
 Goldfeld, Dorian On convolutions of nonholomorphic Eisenstein series. **82d:10040**
 Good, Anton Cusp forms and eigenfunctions of the Laplacian. **82i:10029**
 Lehner, J. On the nonvanishing of Poincaré series. **82c:10042**
 Proskurin, N. V. ★О6 обобщениях Клоостермана. (Russian) [General Kloosterman sums] **82c:10040**
 Rankin, R. A. The vanishing of Poincaré series. **82c:10041**
 Ribet, Kenneth A. Twists of modular forms and endomorphisms of abelian varieties. **82c:10043**
 Endomorphism algebras of abelian varieties attached to newforms of weight 2. **82m:10044**
 Shahidi, Freydoon On certain L -functions. **82i:10030**
 Wagreich, Philip Algebras of automorphic forms with few generators. **82c:10044**
 Automorphic forms and singularities with C^* -action. **82m:10045**
 Waldspurger, J. L. Correspondance de Shimura. [Shimura correspondence] (See **82j:10004**)

secondary classifications:

- Ash, Avner (with Rudolph, Lee) The modular symbol and continued fractions in higher dimensions. **(82g:12011)**
 Huber, Heinz Ueber die Dimension der Eigenräume des Laplace-Operators auf Riemannschen Flächen. **(82k:58094)**
 Minami, Masatsugu Functional evaluation of the dual partition functions. How do we "hear the shape of a drum" in dual models? **(82g:81059)**
 Rudolph, Lee See Ash, Avner, **(82g:12011)**
 Šavgulidze, K. Š. Cusp and quadratic forms of type $(-4, q, 1)$. (Russian. Georgian and English summaries) **(82m:10040)**

10D20 Modular and automorphic forms, several variables

- Arakawa, Tsuneo The dimension of the space of cusp forms on the Siegel upper half plane of degree two related to a quaternion unitary group. **82c:10031**
 Carlsson, Renate (with Johannsen, Wilfried) Der Multiplikator von Theta-Reihen höherer Grades zu quadratischen Formen ungerader Ordnung. **82i:10032**
 Cohn, Harvey An explicit modular equation in two variables and Hilbert's twelfth problem. **82k:10027**
 Diehl, Bardo Die analytische Fortsetzung der Eisensteinreihe zur Siegelschen Modulgruppe. **82f:10032**
 Evdokimov, S. A. Characterization of the Maass space of Siegel modular cusp forms of genus 2. (Russian) **82a:10028**
 Fomenko, O. M. On an identity between the fourth power of a Riemann theta-constant of genus 2 and Eisenstein series. (Russian. English summary) **82c:10031**
 On multidimensional Gaussian sums. (Russian) **82j:10049**
 Freitag, Eberhard Theta-Reihen mit harmonischen Koeffizienten zur Siegelschen Modulgruppe. **82a:10029**
 Harris, Michael Special values of zeta functions attached to Siegel modular forms. **82m:10046**
 The rationality of holomorphic Eisenstein series. **82f:10033**
 Ibukiyama, Tomoyoshi On symplectic Euler factors of genus two. **82m:10047**
 Imai, Kaori Generalization of Hecke's correspondence to Siegel modular forms. **82c:10045**
 Johannsen, Wilfried See Carlsson, Renate, **82i:10032**
 Kojima, Hisashi Siegel modular cusp forms of degree two. **82f:10034**
 Kurokawa, Nobushige Congruences between Siegel modular forms of degree two. II. **82c:10035**
 Ponomarev, Paul The Doi-Naganuma lifting of quaternary theta series. **82j:10050**
 Quas, Werner Berechnung eines Integrals, das bei der Bestimmung des Ranges der Schar der Siegelschen Modulformen auftritt. **82b:10031**
 Raab, Werner Kubische und biquadratische Thetafunktionen. I. **82h:10040a**
 Kubische und biquadratische Thetafunktionen. II. **82h:10040b**
 Shimura, Goro Corrections to: "The special values of the zeta functions associated with Hilbert modular forms" [Duke Math. J. 45 (1978), no. 3, 637–679; MR 80a:10043]. **82j:10051**

secondary classifications:

- Čibrikova, L. I. (with Sil'vestrov, V. V.) Construction of an automorphic analogue of the Cauchy kernel for a class of properly discontinuous groups. (Russian) **(82i:30066)**
 Hirzebruch, F. The canonical map for certain Hilbert modular surfaces. **(82g:10046)**
 Igusa, Jun-ichi On Jacobi's derivative formula and its generalizations. **(82i:14053)**
 Kubert, Daniel S. (with Lang, Serge) Units in the modular function field. V. Iwasawa theory in the modular tower. **(82h:12016)**
 Lal, Sunder (with Nanda, V. C.) On coprime symmetric matrix pairs over algebraic number fields. **(82i:10080)**
 Lang, Serge See Kubert, Daniel S., **(82h:12016)**
 Looijenga, Eduard Invariant theory for generalized root systems. **(82f:17011)**
 Milne, J. S. Points on Shimura varieties mod p . **(82c:10048)**
 Nanda, V. C. See Lal, Sunder, **(82i:10080)**
 Oda, Takayuki Formal groups attached to elliptic modular forms. **(82f:14043)**
 Ribet, Kenneth A. Sur les variétés abéliennes à multiplications réelles. (English summary) **(82f:14021)**
 Sekiguchi, Tsutomu The coincidence of fields of moduli for nonhyperelliptic curves and for their Jacobian varieties. **(82h:14020)**
 Sil'vestrov, V. V. See Čibrikova, L. I., **(82i:30066)**
 Sokurov, V. V. A study of the homology of Kuga varieties. (Russian) **(82f:14023)**
 Terras, Audrey Integral formulas and integral tests for series of positive matrices. **(82g:10047)**

Ts'ao, Liang Chi A note on the cofinal problem for Hilbert modular groups. (82f:10028)

10D21 Hilbert modular forms and surfaces [See also 14J20.]

Eichler, Martin On symmetric and unsymmetric theta functions over a real quadratic field. 82c:10032

Freitag, Eberhard Eine Bemerkung zur Theorie der Hilbertschen

Modulmannigfaltigkeiten hoher Stufe. 82c:10033

(Giraud, Jean) See Surfaces algébriques. 82j:10052

Hausmann, Wilfried ★Kurven auf Hilbertschen Modulflächen. (German) [Curves on Hilbert modular surfaces] 82g:10045

Hida, Haruzo On abelian varieties with complex multiplication as factors of the abelian variety attached to Hilbert modular forms. 82f:10036

Hirzebruch, F. The canonical map for certain Hilbert modular surfaces. 82g:10046

Holzapfel, Rolf-Peter ★Arithmetische Kugelquotientenflächen. (German) [Arithmetic spherical quotient surfaces] 82a:10030a

★Arithmetische Kugelquotientenflächen. (German) [Arithmetic spherical quotient surfaces] 82a:10030b

★Arithmetische Kugelquotientenflächen (Picardische Modulflächen). (German) [Arithmetic spherical quotient surfaces (Picard modular surfaces)] 82a:10030c

(Illusie, Luc) See Surfaces algébriques. 82j:10052

Ishikawa, Hirofumi The traces of Hecke operators in the space of the "Hilbert modular" type cusp forms of weight two. 82k:10028

Kirchheimer, Franz (with Wolfart, Jürgen) Explizite Präsentation gewisser Hilbertscher Modulgruppen durch Erzeugende und Relationen. (English summary) 82c:10034

Kuramoto, Yoshiyuki On Hilbert modular varieties of bicyclic biquadratic fields. 82d:10041

Meyer, Werner (with Szezech, R.) Über eine topologische und zahlentheoretische Anwendung von Hirzebruchs Spitzenauflösung. 82c:10035

(Raynaud, Michel) See Surfaces algébriques. 82j:10052

Szezech, R. See Meyer, Werner. 82c:10035

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Surfaces algébriques ★Surfaces algébriques. (French) [Algebraic surfaces] 82j:10052

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Husemoller, D. Burnside ring of a Galois group and the relations between zeta functions of intermediate fields. (82j:12016)

Kirchheimer, Franz Über explizite Präsentationen Hilbertscher Modulgruppen zu totalreellen Körpern der Klassenzahl eins. (82j:10047)

Mendoza, Eduardo R. ★Cohomology of PGL_2 over imaginary quadratic integers. (82g:22012)

Nakamura, Iku Inoue-Hirzebruch surfaces and a duality of hyperbolic unimodular singularities. I. (82g:14007)

Waldspurger, J. L. Formes quadratiques à 4 variables et relèvement. (82a:10027)

10D23 Congruence properties

Cohn, Harvey Minimal geodesics on Fricke's torus-covering. 82c:10033

Hatada, Kazuyuki Congruences for eigenvalues of Hecke operators on $SL_2(\mathbb{Z})$. 82m:10048

Robert, Gilles Some congruences between Eisenstein series (supersingular case). (See 82j:10003)

secondary classifications:

Kurokawa, Nobushige Congruences between Siegel modular forms of degree two. II. (82f:10035)

10D24 Relations with Dirichlet series

Good, Anton Beiträge zur Theorie der Dirichletreihen, die Spitzenformen zugeordnet sind. (English summary) 82i:10034

Kojima, Hisashi Cusp forms of weight $3/2$. 82b:10032

Pančičkin, A. A. Dirichlet series connected with modular forms of integral and half-integral weight. (Russian) 82a:10031

Piatetski-Shapiro, Ilya Iosifovitch Tate theory for reductive groups and distinguished representations. 82f:10037

Shimura, Goro The periods of abelian varieties with complex multiplication and the special values of certain zeta functions. 82k:10041

Sturn, Jacob Special values of zeta functions, and Eisenstein series of half integral weight. 82b:10033a

Addendum to: "Special values of zeta functions, and Eisenstein series of half integral weight" [Amer. J. Math. 102 (1980), no. 2, 219–240]. 82b:10033b

Terras, Audrey Integral formulas and integral tests for series of positive matrices. 82g:10047

secondary classifications:

Casselman, W. The Hasse-Weil ζ -function of some moduli varieties of dimension greater than one. (82e:10046)

Evdokimov, S. A. Characterization of the Maass space of Siegel modular cusp forms of genus 2. (Russian) (82a:10028)

Gangolli, Ramesh (with Warner, Garth) Zeta functions of Selberg's type for some noncompact quotients of symmetric spaces of rank one. (82m:58049)

Gérardin, Paul Changement du corps de base pour les représentations de $GL(2)$ [d'après R. P. Langlands, H. Saito (Hiroshi Saito) et T. Shintani]. (82b:10036)

Goldfeld, Dorian On convolutions of nonholomorphic Eisenstein series. (82d:10040)

(Langlands, Robert P.) See Gérardin, Paul. (82b:10036)

Mazur, Barry On the arithmetic of special values of L functions. (82e:14033)

Moroz, B. Z. On the convolution of Hecke L -functions. (82f:12020)

Queffelec, Hervé Propriétés presque sûres et quasi-sûres des séries de Dirichlet et des produits d'Euler. (82c:10050)

(Saito, Hiroshi) See Gérardin, Paul. (82b:10036)

(Shintani, Takuro) See Gérardin, Paul. (82b:10036)

Warner, Garth See Gangolli, Ramesh. (82m:58049)

10D25 Complex multiplication [See also 14K22.]

Hida, Haruzo On abelian varieties with complex multiplication as factors of the Jacobians of Shimura curves. 82k:10029

Morita, Yasuo Classification of a family of abelian varieties parametrized by reduction modulo \mathfrak{p} of a Shimura curve. 82c:10036

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secondary classifications:

Deligne, Pierre Cycles de Hodge absolus et périodes des intégrales des variétés abéliennes. (82b:14027)

Greenberg, Ralph On the Jacobian variety of some algebraic curves. (82j:14036)

Hano, Jun-ichi A transformation formula of a generalized theta series. (82a:14017)

Lai, K. F. (with Wong, Bun) Two moduli problems and some of their connections with differential geometry. (82b:14006)

Langlands, Robert P. Sur la mauvaise réduction d'une variété de Shimura. (82c:10039)

Robert, Gilles Congruences entre séries d'Eisenstein, dans le cas supersingulier. (82c:10037)

Rück, Hans-Georg Diskriminanten zu singulären Werten von j . (82f:10027)

Schmidt, C.-G. Der Definitionskörper für den Zerfall einer abelschen Varietät mit komplexer Multiplikation. (82f:14038)

Shimura, Goro The periods of abelian varieties with complex multiplication and the special values of certain zeta functions. (82b:10041)

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Yoshida, Hiroyuki Abelian varieties with complex multiplication and representations of the Weil groups. (82k:14044)

10D30 p -adic theory, local fields [See also 14G20, 22E50.]

Gerritzen, Lothar (with van der Put, Marius) ★Schottky groups and Mumford curves. 82j:10053

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van der Put, Marius See Gerritzen, Lothar. 82j:10053

Robert, Gilles Congruences entre séries d'Eisenstein, dans le cas supersingulier. 82c:10037

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Asmuth, C. (with Repka, Joe) Supercuspidal components of the quaternion Weil representation of $SL_2(\mathbb{F})$. (82j:22017)

Hazewinkel, Michiel ★Formal groups and applications. (82a:14020)

van der Put, Marius The class group of a one-dimensional affinoid space. (82b:14018)

Repka, Joe See Asmuth, C.. (82j:22017)

Saito, Hiroshi On a decomposition of spaces of cusp forms and trace formula of Hecke operators. (82c:10028)

10D35 Galois properties

secondary classifications:

Katz, Nicholas M. Galois properties of torsion points on abelian varieties. (82d:14025)

Mori, Shigefumi On Tate conjecture concerning endomorphisms of abelian varieties. (82d:14026)

Randol, Burton A remark on the multiplicity of the discrete spectrum of congruence groups. (82c:58057)

10D40 Representation-theoretic methods, trace formulas

Casselman, W. The Hasse-Weil ζ -function of some moduli varieties of dimension greater than one. 82e:10046

Clozel, Laurent Changement de base pour les représentations tempérées des groupes réductifs réels. (English summary) 82b:10034

Gelbart, Stephen (with Piatetski-Shapiro, Ilya Iosifovitch) Distinguished representations and modular forms of half-integral weight. 82b:10035

Gérardin, Paul (with Labesse, J.-P.) The solution of a base change problem for $GL(2)$ (following Langlands, Saito, Shintani). 82c:10047

Changement du corps de base pour les représentations de $GL(2)$ [d'après R. P. Langlands, H. Saito (Hiroshi Saito) et T. Shintani]. 82b:10036

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Jacquet, Hervé (with Piatetski-Shapiro, Ilya Iosifovitch; Shalika, Joseph) Facteurs L et ϵ du groupe linéaire. (English summary) 82c:10038

(with Shalika, Joseph) On Euler products and the classification of automorphic representations. I. 82m:10050a

(with Shalika, Joseph) On Euler products and the classification of automorphic forms. II. 82m:10050b

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Kottwitz, Robert Edward Orbital integrals on GL_n . 82b:10037

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 ★Base change for $GL(2)$. **82a:10032**
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- Milne, J. S. Points on Shimura varieties mod p . **82e:10048**
 Murase, Atsushi. Sur l'uniformité de la distribution de G_0 dans G_A . (See **82b:10004**)
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 Proskurin, N. V. Estimates of the eigenvalues of Hecke operators in the space of cusp forms of weight 0. (Russian) **82e:10049**
 Rallis, S. (with Schiffmann, G.) On a relation between SL_2 cusp forms and cusp forms on tube domains associated to orthogonal groups. **82c:10040**
 (Saito, Hiroshi). See Gérardin, Paul. **82b:10036**
 Schiffmann, G. See Rallis, S. **82c:10040**
 Scott, David. Selberg-type zeta functions for the group of complex two by two matrices of determinant one. **82c:10050**
 Shalika, Joseph. See Jacquet, Hervé; et al., **82c:10038**; **82c:10035**; and **82m:10050**
 Shintani, Takuro. On liftings of holomorphic cusp forms. **82c:10051**
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 Suzuki, Toshiaki. Weil-type representations and automorphic forms. **82e:10052**
 Venkov, A. B. (with Zograf, P. G.) Analogues of Artin factorization formulas in the spectral theory of automorphic functions associated with induced representations of Fuchsian groups. (Russian) **82k:10030**
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Automorphic Forms, Representation Theory and Arithmetic ★Automorphic forms, representation theory and arithmetic. **82c:10036**
- secondary classifications:
- Asmuth, C. (with Repka, Joe) Supercuspidal components of the quaternion Weil representation of $SL_2(\mathbb{F})$. **(82j:22017)**
 Digne, François (with Michel, Jean) Descente de Shintani des caractères d'un groupe de Chevalley fini. (English summary) **(82b:20065)**
 Duistermaat, J. J. (with Kolk, J. A. C.; Varadarajan, V. S.) Spectra of compact locally symmetric manifolds of negative curvature. **(82a:58050a)**
 (with Kolk, J. A. C.; Varadarajan, V. S.) Erratum: "Spectra of compact locally symmetric manifolds of negative curvature". **(82a:58050b)**
 Elstrodt, J. Die Selbergsche Spurformel für kompakte Riemannsche Flächen. **(82m:10043)**
 Fegan, H. D. The spectrum of the Laplacian on forms over a Lie group. **(82b:58094)**
 Feustel, Jan-Michael ★Volumina der Fundamentalgebiete der Spiegelscheiben
 Picardscher Modulgruppen. (German) [Volumes of the fundamental domains of the reflection surfaces of the Picard modular groups] **(82b:32031)**
 Gangolli, Ramesh (with Warner, Garth) Zeta functions of Selberg's type for some noncompact quotients of symmetric spaces of rank one. **(82m:58049)**
 Gelbart, Stephen (with Knapp, A. W.) Irreducible constituents of principal series of $SL_n(k)$. **(82j:22018)**
 Ibukiyama, Tomoyoshi On symplectic Euler factors of genus two. **(82m:10047)**
 Imai, Kaori Generalization of Hecke's correspondence to Siegel modular forms. **(82c:10045)**
 Ishikawa, Hirofumi The traces of Hecke operators in the space of the "Hilbert modular" type cusp forms of weight two. **(82k:10028)**
 Jacquet, Hervé (with Piatetski-Shapiro, Ilya Iosifovitch; Shalika, Joseph) Facteurs L et ϵ du groupe linéaire: théorie archimédienne. (English summary) [L - and ϵ -factors for the linear group: Archimedean theory] **(82c:22021)**
 Kazhdan, David An introduction to Drinfel'd's "Shtuka". **(82c:12018)**
 Knapp, A. W. See Gelbart, Stephen, **(82j:22018)**
 Koch, Helmut On the local Langlands conjecture for central division algebras of index p . **(82c:12013)**
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 Kutzko, Philip The Langlands conjecture for GL_2 of a local field. **(82c:12019)**
 Lai, K. F. Tamagawa number of reductive algebraic groups. **(82d:20043)**
 Lax, Peter D. (with Phillips, Ralph S.) Correction to: "Translation representations for the solution of the non-Euclidean wave equation" [Comm. Pure Appl. Math. 32 (1979), no. 5, 617-667; MR 81a:43013]. **(82a:43010)**
 Michel, Jean See Digne, François, **(82b:20065)**
 Moreno, Carlos Julio Harmonic tendencies in number theory. (Spanish) **(82c:10002)**
 Phillips, Ralph S. See Lax, Peter D., **(82a:43010)**
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 Repka, Joe Base change for tempered irreducible representations of $GL(n, \mathbb{R})$. **(82m:22016)**
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 Richardson, Leonard F. Poisson summation on Kirillov orbits. **(82b:22018)**
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 Waldspurger, J. L. Correspondance de Shimura. [Shimura correspondence] (See **82j:10004**)
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- 10D45 Uniformization, periods and cohomology
- Goss, David π -adic Eisenstein series for function fields. **82c:10053**
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- secondary classifications:
- Nakazato, Hajime On odd two-dimensional icosahedral Galois representations with square free conductor. **(82j:12013)**
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- 10D99 None of the above, but in this section
- secondary classifications:
- Goss, David π -adic Eisenstein series for function fields. **(82c:10053)**
 Humphreys, James E. ★Arithmetic groups. **(82j:10041)**
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- 10Exx Geometry of numbers
- 10E05 Lattices and convex bodies [See also 10J25.]
- Bakiev, K. See Skubenko, B. F., **82b:10039**
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 Liu, Andy C. F. Lattice points and Pick's theorem. **82d:10042**
 Scott, Paul R. On simplices and lattice points. **82c:10037**
 Skubenko, B. F. (with Bakiev, K.) Translation theorem in the nonhomogeneous Minkowski problem. (Russian. English summary) **82b:10039**
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- secondary classifications:
- Arkin, J. R. Minimal requirements for Minkowski's theorem in the plane. I, II. **(82f:52013)**
 Haber, Seymour A number-theoretic problem in numerical approximation of integrals. **(82c:65027)**
 Lomakina, Z. D. Voronoi's polyhedron $\Pi(n)$ for $n=5$ and maximal finite groups of integral 5×5 matrices. (Russian) **(82c:10057)**
 Nowak, Werner Georg Einige Verallgemeinerungen des Gaußschen Kreisproblems. **(82c:10086)**
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- 10E10 Nonconvex bodies
- 10E15 Products of linear forms
- Adams, William W. The best two-dimensional Diophantine approximation constant for cubic irrationals. **82c:10038**
 Woods, A. C. The asymmetric product of three homogeneous linear forms. **82k:10032**
- secondary classifications:
- Cusick, T. W. Estimates for Diophantine approximation constants. **(82j:10057)**
- 10E20 Minima of forms [See also 10C25.]
- Dumir, V. C. (with Hans-Gill, R. J.) Positive values of nonhomogeneous quaternary quadratic forms. **82b:10043**
 Hans-Gill, R. J. (with Raka, Madhu) An inequality for indefinite ternary quadratic forms of type (2, 1). **82b:10040**
See also Dumir, V. C., **82b:10043**
 Jurkat, W. B. On successive minima with constraints. **82b:10044**
 Kokarev, V. N. Estimate of the maximum negative eigenvalue of the quadratic form $d^2[D(h_{ij}, h_{ij}, h_{ij}^0, \dots, h_{ij}^0)]^{1/2}$. (Russian) **82c:10055**
 Raka, Madhu The inhomogeneous minimum of quadratic forms of signature ± 1 . **82b:10045**
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 Vetčinkin, N. M. Uniqueness of classes of positive quadratic forms, on which values of Hermite constants are reached for $6 \leq n \leq 8$. (Russian) **82f:10040**
 Zaharova, N. V. Centerings of eight-dimensional lattices that preserve a frame of successive minima. (Russian) **82k:10033**
- secondary classifications:
- Skubenko, B. F. Dense lattice packings of spheres in Euclidean spaces of dimension $n \leq 16$. (Russian) **(82d:10044)**
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 Tits, Jacques Quaternions over $\mathbb{Q}(\sqrt{5})$, Leech's lattice and the sporadic group of Hall-Janko. **(82k:20034)**
 Woods, A. C. The asymmetric product of three homogeneous linear forms. **(82k:10032)**
- 10E25 Quadratic forms (reduction, extreme forms, etc.) [See also 10C05.]
- Baranovskii, E. P. The reduction domain, in the sense of Selling, of positive quadratic forms of five variables. (Russian) **82c:10056**

Chalk, J. H. H. Linearly independent zeros of quadratic forms over number fields. **82c:10041**

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Lomakina, Z. D. Voronoi's polyhedron $\Pi(n)$ for $n=5$ and maximal finite groups of integral 5×5 matrices. (Russian) **82e:10057**

See also Ryškov, S. S.; et al., **82i:10040**

Pronin, L. N. Automorphisms of positive binary Hermitian forms over a ring of integral quaternions. (Russian) **82h:10046**

Ryškov, S. S. (with Kon, M. Dž.) On the theory of construction of the Minkowski reduction domain. (Russian) **82i:10039**

(with Kon, M. Dž.; Lomakina, Z. D.) Vertices of a symmetrized Minkowski domain for $n \leq 5$. (Russian) **82i:10040**

Sušbaev, S. Š. On the Rankin-Sobolev problem of the multidimensional zeta function (estimate of the origin of the ray of extremality of the principal perfect form). (Russian) **82f:10041**

secondary classifications:

Cook, Roger J. On the fractional parts of a set of points. IV. (**82k:10036**)

Moss, Kenneth N. Homology of $SL(n, \mathbb{Z}[1/p])$. (**82b:20061**)

Skubenko, B. F. Dense lattice packings of spheres in Euclidean spaces of dimension $n \leq 16$. (Russian) **82d:10044**

Tahtadžjan, L. A. See Vinogradov, A. I., (**82j:10083**)

Tupitsyn, Victor G. On the maximum value of a quadratic form over binary sequences. (**82c:05069**)

Vinogradov, A. I. (with Tahtadžjan, L. A.) Linnik-Skubenko asymptotics. (Russian) (**82j:10083**)

Zaharova, N. V. Uniformly discrete systems with optimal L -triangulation. (Russian) (**82b:52014**)

Centerings of eight-dimensional lattices that preserve a frame of successive minima. (Russian) (**82k:10033**)

10E30 Lattice packing and covering [See also 05B40, 52A45.]

Komlós, János (with Pintz, János; Szemerédi, Endre) On Heilbronn's triangle problem. **82m:10051**

Pintz, János See Komlós, János; et al., **82m:10051**

Skubenko, B. F. Dense lattice packings of spheres in Euclidean spaces of dimension $n \leq 16$. (Russian) **82d:10044**

A remark on the upper bound of the Hermite constant for the densest lattice packing of spheres. (Russian) **82d:10045**

Szemerédi, Endre See Komlós, János; et al., **82m:10051**

secondary classifications:

Fields, K. L. The fragile lattice packings of spheres in three-dimensional space. (**82e:52015a**)

(with Nicolich, M. J.) The fragile lattice packings of spheres in four-dimensional space. (**82e:52015b**)

Nicolich, M. J. See Fields, K. L., (**82e:52015b**)

10E35 Mean value theorems

secondary classifications:

Terras, Audrey Integral formulas and integral tests for series of positive matrices. (**82g:10047**)

10E40 Transfer theorems

Grigor'ev, N. A. Regular simplexes inscribed into a cube and Hadamard matrices. (Russian) **82d:10043**

10E45 Automorphism groups of lattices [See also 10C30.]

secondary classifications:

Plesken, Wilhelm Bravais groups in low dimensions. (**82k:20077**)

Tits, Jacques Four presentations of Leech's lattice. (See **82b:20021**)

10E99 None of the above, but in this section

Kuz'minyh, A. V. Sets with nearly integral distances. (Russian) **82f:10042**

secondary classifications:

Brunotte, Horst Zur Beziehung zwischen Basen und Vektoren kürzester Länge in Gittern. (English summary) (**82g:12005**)

Erdős, Paul Proof of a conjecture of Offord. (**82d:05009**)

Skrikanov, M. M. General properties of the spectrum of differential and pseudodifferential operators with periodic coefficients and some problems of the geometry of numbers. (Russian) (**82d:35074**)

Vaal, Jeffrey D. On linear forms and Diophantine approximation. (**82j:10065**)

10Fxx Diophantine approximation [See also 10K15.]

10F05 Approximation to one number

Dubois, Eugène Best approximations of zero by a cubic linear form. Calculation of the fundamental unit of a not totally real cubic field. (See **82j:10003**)

Kiss, Péter A Diophantine approximative property of the second order linear recurrences. **82k:10034**

Uchiyama, Saburō On rational approximations to irrational numbers. **82j:10055**

Viola, C. Diophantine approximation in short intervals. **82e:10058**

Worley, R. T. Estimating $|\alpha - p/q|$. **82m:10052**

Xu, Guang Shan Lower bounds of linear forms of a class of G -functions. (Chinese) **82k:10035**

secondary classifications:

Beukers, F. The generalised Ramanujan-Nagell equation. (See **82j:10003**)

10F10 Simultaneous approximation

Baker, R. C. On the fractional parts of αn^2 and βn . **82j:10056**

Bijsma, Alex An elliptic analogue of the Franklin-Schneider theorem. (French summary) **82c:10042**

Cook, Roger J. On the fractional parts of a set of points. IV. **82k:10036**

Cusick, T. W. Estimates for Diophantine approximation constants. **82j:10057**
View-obstruction problems. II. **82m:10053**

Hlawka, Edmund Approximation von Irrationalzahlen und pythagoräische Tripel. **82f:10043**

Über einige Reihen, welche mit den Vielfachen von Irrationalzahlen zusammenhängen. **82a:10033**

Jurkat, W. B. (with Kratz, W.) On optimal systems and on the structure of simultaneous Diophantine approximations. **82m:10054**

Kratz, W. See Jurkat, W. B., **82m:10054**

Lagarias, J. C. Some new results in simultaneous Diophantine approximation. (See **82j:10003**)

Langmayr, Franz On Dirichlet's approximation theorem. **82e:10059**

Osgood, Charles F. Differential algebra and the simultaneous approximation by rational functions of power series solutions to algebraic functional equations. **82m:10055**

Sarada, K. Approximation of linear forms of a class of E -functions. **82i:10041**

Turk, J. W. M. \star Polynomial values and almost powers. **82e:10060**

Vil'činskii, V. T. On simultaneous approximations by irreducible fractions. (Russian. English summary) **82j:10058**

secondary classifications:

Adams, William W. The best two-dimensional Diophantine approximation constant for cubic irrationals. (**82i:10038**)

Riedel, Norbert A counterexample to the unimodular conjecture on finitely generated dimension groups. (**82i:06026**)

Schmidt, Wolfgang M. Simultaneous p -adic zeros of quadratic forms. (**82b:10026**)

10F15 Nonhomogeneous approximation

10F20 Continued fractions and generalizations [See also 10A32, 10K10.]

Batut, Christian (with Olivier, Michel) Sur l'accélération de la convergence de certaines fractions continues. **82b:10041**

Olivier, Michel See Batut, Christian, **82b:10041**

Schweiger, Fritz An estimate for the length of a finite Jacobi algorithm. **82j:10059**

Selmer, Ernst S. On the postage stamp problem with three stamp denominations. **82d:10046**

Tahtadžjan, L. A. Asymptotic formula for the sum of the lengths of the periods of the quadratic irrationalities of discriminant D . (Russian. English summary) **82d:10047**

Wilson, Stephen M. J. Limit points in the Lagrange spectrum of a quadratic field. (French summary) **82m:10056**

secondary classifications:

Adams, William W. (with Razar, Michael J.) Multiples of points on elliptic curves and continued fractions. (**82c:14031**)

Haag, G. (with Hanggi, Peter) Continued fraction solutions of discrete master equations not obeying detailed balance. II. (**82b:82013**)

Hanggi, Peter See Haag, G., (**82b:82013**)

Parusnikov, V. I. The Jacobi-Perron algorithm and simultaneous approximation of functions. (Russian) (**82b:41027**)

Pisot, Charles Sur des développements en algorithmes de Jacobi de certaines irrationnelles liées à des fonctions de Bessel. (English summary) (**82b:10042**)

Razar, Michael J. See Adams, William W., (**82c:14031**)

Richards, Ian Continued fractions without tears. (**82i:10010**)

Worley, R. T. Estimating $|\alpha - p/q|$. (**82m:10052**)

10F25 Approximation to algebraic numbers

Györy, Kálmán Explicit lower bounds for linear forms with algebraic coefficients. **82c:10043**

secondary classifications:

Smyth, C. J. On the measure of totally real algebraic integers. (**82j:12002a**)
On the measure of totally real algebraic integers. II. (**82j:12002b**)

10F30 Approximation by numbers from a fixed field

Osgood, Charles F. The approximation of solutions to linear homogeneous differential equations by rational functions. **82c:10044**

secondary classifications:

Bernik, V. I. (with Želudev, F. F.) On integral polynomials that assume small values on

- a certain interval. (Russian. English summary) (82k:10069)
Brauer, Erhard On the approximation of e^n by a certain class of algebraic numbers. (82j:10051a)
 Corrigendum: "On the approximation of e^n by a certain class of algebraic numbers". (82j:10051b)
Selmer, Ernst S. On the postage stamp problem with three stamp denominations. (82d:10046)
Želudev, F. F. See **Bernik, V. I.** (82k:10069)

10F35 Irrationality and transcendence

- Alladi, Krishnaswami** ★Legendre polynomials and irrational numbers. 82a:10034
Anderson, M. (with **Masser, David W.**) Lower bounds for heights on elliptic curves. 82j:10049
Bertrand, Daniel Fonctions modulaires et indépendance algébrique. II. 82d:10048 (with **Waldschmidt, Michel**) Quelques travaux récents en théorie des nombres transcendants. 82j:10050
 Représentations des corps de nombres et théorie de Baker. [Representations of number fields and Baker's theory] (See 82m:10006)
 (with **Laurent, Michel**) Propriétés de transcendance de nombres liés aux fonctions θ -éta. (English summary) 82k:10037
 See also **Abelian functions and transcendental numbers**, 82c:10047 and **Waldschmidt, Michel**, 82k:10041
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Brownawell, W. Dale Methods for algebraic independence. (See 80h:10004)
 On the orders of certain functions. 82k:10038
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Chudnovsky, David V. (with **Chudnovsky, Gregory V.**) Remark on the nature of the spectrum of the Lamé equation. A problem from transcendence theory. 82m:10057
Chudnovsky, Gregory V. On the path to Schanuel's conjecture. Algebraic curves close to a point. I. General theory of colored sequences. (Russian) 82d:10050a
 On the path to Schanuel's conjecture. Algebraic curves close to a point. II. Fields of finite transcendence type and colored sequences. Resultants. (Russian) 82d:10050b
 Padé approximation and the Riemann monodromy problem. 82h:10047
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 Algebraic grounds for the proof of algebraic independence. How to obtain measure of algebraic independence using elementary methods. I. Elementary algebra. 82j:10060
 See also **Chudnovsky, David V.**, 82m:10057
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Galochin, A. I. Criterion for membership of hypergeometric Siegel functions in a class of E -functions. (Russian) 82k:10042
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Gramain, François Sur le théorème de Fukasawa-Gelfond. [On the Fukasawa-Gelfond theorem] (See 82m:10006)
Iskii, Kiyoshi On the irrationality of the sum of some infinite series. 82k:10040
Laurent, Michel Transcendance de périodes d'intégrales elliptiques. 82c:10046a
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 See also **Bertrand, Daniel**, 82k:10037
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Masser, David W. Small values of the quadratic part of the Néron-Tate height. (See 82j:10004)
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Nikishin, E. M. A property of Taylor coefficients. (Russian) 82c:10063
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 Transcendance et fonctions elliptiques. [Transcendence and elliptic functions] (See 82m:10006)
 (Serre, Jean-Pierre) See **Waldschmidt, Michel**, 82k:10041
Shiokawa, Iekata On irrationality of the values of certain series. (See 82m:10006)
Sidlovskii, A. B. Arithmetic properties of polynomials of values of E -functions connected with algebraic equations in a field of rational functions. (Russian) 82f:10046
 Estimate of a measure of mutual transcendence of values of E -functions connected by arbitrary algebraic equations over $\mathbb{C}(z)$. (Russian) 82c:10064
Toyotomi, Masao A note on the periods of elliptic functions. I, II. 82a:10036
Vaaler, Jeffrey D. On linear forms and Diophantine approximation. 82j:10065
Väänänen, Keijo On transcendental numbers. (Finnish. English summary) 82b:10043
Van der Poorten, Alfred J. Some wonderful formulae ... footnotes to Apéry's proof of the irrationality of $\zeta(3)$. 82a:10037

- Waldschmidt, Michel** ★Nombres transcendants et groupes algébriques. (French) [Transcendental numbers and algebraic groups] 82k:10041
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Wang, Yuan (with **Wang, Lian Xiang**; **Ren, Jian Hua**) A note on a transference theorem of the systems of linear congruences. 82i:10043
Welzel, Helmut Eine arithmetische Eigenschaft der Koeffizienten hypergeometrischer Funktionen mit algebraischen Parametern. 82d:10051
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Abelian Functions and Transcendental Numbers ★Fonctions abéliennes et nombres transcendants. (French) [Abelian functions and transcendental numbers] 82c:10047
Palaiseau ★Fonctions abéliennes et nombres transcendants. (French) [Abelian functions and transcendental numbers] 82c:10047
 secondary classifications:
Bertrand, Daniel Variétés abéliennes et formes linéaires d'intégrales elliptiques. [Abelian varieties and linear forms of elliptic integrals] (See 82j:10004)
 Kummer theory on the product of an elliptic curve by the multiplicative group. (82i:12003)
Bodnarčuk, P. I. (with **Pustomel'nikov, I. P.**; **Krovickii, I. I.**) Representation of algebraic irrationals by branching continued fractions. (Russian) (82a:10012)
 (Bratz, K.) See **Drinfel'd, G. I.**, (82k:10001)
Chudnovsky, Gregory V. Algebraic independence of the values of elliptic function at algebraic points. (82f:10047)
Drinfel'd, G. I. ★Quadratur des Kreises und Transzendenz von π . (German) [Quadrature of the circle and transcendence of π] (82k:10001)
Epstein, H. I. A natural structure theorem for complex fields. (82i:12025)
 (Gelfond, A. O.) See **Drinfel'd, G. I.**, (82k:10001)
Krovickii, I. I. See **Bodnarčuk, P. I.**; et al., (82a:10012)
 (Pieper, H.) See **Drinfel'd, G. I.**, (82k:10001)
Pustomel'nikov, I. P. See **Bodnarčuk, P. I.**; et al., (82a:10012)
Uchiyama, Saburō On rational approximations to irrational numbers. (82j:10055)

10F37 Independence results

- Bertrand, Daniel** Variétés abéliennes et formes linéaires d'intégrales elliptiques. [Abelian varieties and linear forms of elliptic integrals] (See 82j:10004)
Chudnovsky, Gregory V. Algebraic independence of the values of elliptic function at algebraic points. 82f:10047
Dvornicich, Roberto Linear independence of "logarithms" in linear varieties. 82a:10038
Nguen T'en Tai On the estimates of zero orders of polynomials of analytic functions and their application to estimates of the measure of mutual transcendence of E -function values. (Russian) 82k:10043
Nikishin, E. M. Logarithms of natural numbers. (Russian) 82h:10044a
 Correction: "Logarithms of natural numbers". (Russian) 82h:10044b
 A set of power series. (Russian) 82k:10045
Philippon, P. Indépendance algébrique de valeurs de fonctions elliptiques p -adiques. [Algebraic independence of values of p -adic elliptic functions] 82m:10058
Shiokawa, Iekata Correction to my paper: "Arithmetic properties of certain power series with algebraic coefficients" [Seminar on Number Theory, 1979-1980, Exp. No. 27, Univ. Bordeaux I, Talence, 1980]. (See 82m:10006)
Sidlovskii, A. B. Estimates of polynomials from values of E -functions. (Russian) 82k:10044
Šmečlov, O. O. Algebraic independence of several numbers connected with exponential and elliptic functions. (Russian) 82k:10046
Väänänen, Keijo On linear forms of a certain class of G -functions and p -adic G -functions. 82h:10045
 secondary classifications:
Bertrand, Daniel Travaux récents sur les points singuliers des équations différentielles linéaires. (82a:34007)
 Représentations des corps de nombres et théorie de Baker. [Representations of number fields and Baker's theory] (See 82m:10006)
Bijsma, Alex An elliptic analogue of the Franklin-Schneider theorem. (French summary) (82c:10042)
Chudnovsky, Gregory V. Degrés de sous-variétés contenant des "cubes" de groupes algébriques. (English summary) (82b:14023)
Flicker, Yuval Z. Linear forms on arithmetic abelian varieties: ineffective bounds. (82f:10049)
Matveev, E. M. Some Diophantine equations with a large number of variables. (Russian. English summary) (82h:10026)
Sarada, K. Approximation of linear forms of a class of E -functions. (82i:10041)
Silverman, Joseph H. Lower bound for the canonical height on elliptic curves. (82k:14043)
Vaaler, Jeffrey D. On linear forms and Diophantine approximation. (82j:10065)
Wagstaff, Samuel S., Jr. The computational complexity of solving exponential congruences. (82k:10009)
Wang, Lian Xiang (with **Xu, Guang Shan**) On a Diophantine inequality involving a class of G -functions in p -adic form. (82j:10066)

Xu, Guang Shan Lower bounds of linear forms of a class of G -functions. (Chinese) (82i:10035)

See also Wang, Lian Xiang. (82j:10066)

10F40 Distribution modulo one [See also 10K05.]

Baker, R. C. (with Harman, G.) Small fractional parts of quadratic and additive forms. 82i:10065

Boyd, David W. Kronecker's theorem and Lehmer's problem for polynomials in several variables. 82i:10066

Chen, W. W. L. On irregularities of distribution. 82i:10044

Cook, Roger J. Small fractional parts of quadratic forms in many variables. 82a:10039

Coquet, Jean Sur l'équirépartition des suites à croissance lente et des suites non

décroissantes. (English summary) 82d:10052

Harman, G. See Baker, R. C., 82i:10065

Kamilo, M. H. A generalization of a theorem of I. M. Vinogradov. (Russian. Turkmen summary) 82h:10050

Niederreiter, Harald (with Shiu, Jau Shyong) Equidistribution of linear recurring sequences in finite fields. II. 82f:10048

Shiu, Jau Shyong See Niederreiter, Harald, 82f:10048

secondary classifications:

Baker, R. C. On the fractional parts of an^2 and βn . (82j:10056)

Borel, Jean-Pierre Quelques résultats d'équirépartition liés aux nombres premiers généralisés de Beurling. (82k:10060)

Coquet, Jean Une remarque sur les suites équiréparties à croissance lente. (82a:10059)

Niederreiter, Harald Verteilung von Resten rekursiver Folgen. (82i:10015)

Ren, Jian Hua See Wang, Yuan; et al., (82i:10043)

Taschner, Rudolf J. Der Differenzensatz von van der Corput und gleichverteilte Funktionen. (82i:10009)

Wang, Lian Xiang See Wang, Yuan; et al., (82i:10043)

Wang, Yuan (with Wang, Lian Xiang; Ren, Jian Hua) A note on a transference theorem of the systems of linear congruences. (82i:10043)

10F45 Approximation in non-Archimedean valuations

Flicker, Yuval Z. Linear forms on arithmetic abelian varieties: ineffective bounds. 82f:10049

secondary classifications:

Diamond, Jack The Schneider-Lang theorem for functions with essential singularities. (82k:10039)

Matveev, E. M. Some Diophantine equations with a large number of variables. (Russian. English summary) (82i:10026)

10F99 None of the above, but in this section

secondary classifications:

Györy, Kálmán On certain graphs composed of algebraic integers of a number field and their applications. I. (82f:12001)

10Gxx Trigonometric sums, exponential sums and character sums

10G05 Exponential sums

Agrawal, M. K. See Parnami, J. C.; et al., 82g:10054

Arhipov, G. I. (with Karacuba, A. A.; Čubarikov, V. N.) Multiple trigonometric sums. (Russian) 82i:10045

Berndt, Bruce C. (with Schoenfeld, Lowell) Corrigendum to the paper: "Periodic analogues of the Euler-Maclaurin and Poisson summation formulas with applications to number theory" [Acta Arith. 28 (1975/76), no. 1, 23-68; MR 52 #5586]. 82a:10040

Bressoud, David M. On the value of Gaussian sums. 82h:10046

Čubarikov, V. N. See Arhipov, G. I.; et al., 82i:10045

Evans, Ronald J. Generalized cyclotomic periods. 82f:10050

Ghosh, Amit The distribution of ap^2 modulo 1. 82j:10067

(Illusie, Luc) See Katz, Nicholas M., 82m:10059

Karacuba, A. A. See Arhipov, G. I.; et al., 82i:10045

Katz, Nicholas M. ★Sommes exponentielles. (French) [Exponential sums] 82m:10059

(Laumon, Gérard) See Katz, Nicholas M., 82m:10059

Ono, Takashi On certain numerical invariants of mappings over finite fields. I. 82f:10051a

On certain numerical invariants of mappings over finite fields. II. 82f:10051b

On certain numerical invariants of mappings over finite fields. III. 82f:10051c

On certain numerical invariants of mappings over finite fields. IV. 82f:10051d

On certain numerical invariants of mappings over finite fields. V. 82f:10051e

Parnami, J. C. (with Agrawal, M. K.; Rajwade, A. R.) A congruence relation between the coefficients of the Jacobi sum. 82g:10054

Rajwade, A. R. See Parnami, J. C.; et al., 82g:10054

Ramanathan, K. G. (with Subbarao, M. V.) Some generalizations of Ramanujan's sum. 82e:10067

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Smith, Robert Arnold A generalization of Kuznetsov's identity for Kloosterman sums. 82j:10068

Subbarao, M. V. See Ramanathan, K. G., 82e:10067

Vinogradov, I. M. ★Метод тригонометрических сум в теории чисел. (Russian) [The method of trigonometric sums in the theory of numbers] 82h:10047

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Andrews, George E. Notes on the Dyson conjecture. (82e:33002)

Fogels, E. K. On a hypothesis in the theory of prime numbers. (Russian) (82i:10052)

Fomenko, O. M. On multidimensional Gaussian sums. (Russian) (82j:10049)

Steinmetz, Norbert Zur Wertverteilung der Quotienten von Exponentialpolynomen. (82e:30035)

10G10 Estimates on exponential sums

Arhipov, G. I. (with Karacuba, A. A.; Čubarikov, V. N.) Uniform estimates of multiple trigonometric sums. (Russian) 82g:10055

Chalk, J. H. H. The Vinogradov-Mordell-Tietäväinen inequalities. 82d:10053

Čubarikov, V. N. See Arhipov, G. I.; et al., 82g:10055

Gonek, S. M. A note on Turán's method. 82e:10068

Il'jasov, I. I. An estimate of a sum of fractional parts. (Russian) 82f:10052

Karacuba, A. A. See Arhipov, G. I.; et al., 82g:10055

Lavrik, A. F. Trigonometric sums in primes of arithmetic progressions. (Russian) 82i:10046

Leitmann, Dieter Abschätzung trigonometrischer Summen. 82h:10048

Montgomery, Hugh L. An exponential polynomial formed with the Legendre symbol. 82a:10041

Pichorides, S. K. A theorem of J.-F. Fournier on Littlewood's conjecture. 82d:10054

secondary classifications:

Arhipov, G. I. (with Karacuba, A. A.; Čubarikov, V. N.) On a system of Diophantine equations. (Russian) (82a:10022)

Bykovskii, V. A. Systems of inequalities. (Russian. English summary) (82k:10020)

Čubarikov, V. N. See Arhipov, G. I.; et al., (82a:10022)

Ghosh, Amit The distribution of ap^2 modulo 1. (82j:10067)

Graham, S. W. The distribution of squarefree numbers. (82i:10054)

Karacuba, A. A. See Arhipov, G. I.; et al., (82a:10022)

Proskurin, N. V. ★О6 общих суммах Клоостермана. (Russian) [General Kloosterman sums] (82i:10040)

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Berndt, Bruce C. (with Evans, Ronald J.) The determination of Gauss sums. 82h:10051

Evans, Ronald J. See Berndt, Bruce C., 82h:10051

Tuler, Randy Arithmetic sums that determine linear characters on $\Gamma(N)$. 82d:10055

Williams, Kenneth S. Remark on an assertion of Chowla. 82m:10060

secondary classifications:

Adolphson, Alan (with Sperber, Steven) Exponential sums on the complement of a hypersurface. (82c:14023)

Smith, Robert Arnold (with Subbarao, M. V.) The average number of divisors in an arithmetic progression. (82i:10063)

Sperber, Steven See Adolphson, Alan, (82c:14023)

Subbarao, M. V. See Smith, Robert Arnold, (82i:10063)

10G20 Estimates on character sums

secondary classifications:

Tahtadjan, L. A. See Vinogradov, A. I., (82j:10083)

Vinogradov, A. I. (with Tahtadjan, L. A.) Linnik-Skubenko asymptotics. (Russian) (82j:10083)

10G99 None of the above, but in this section

secondary classifications:

Car, Mireille La méthode des sommes trigonométriques pour $F_q[X]$. (82k:10061)

Hernando, J. A. See Massidda, V., (82a:82046)

Massidda, V. (with Hernando, J. A.) The planewise summation method for trilinear lattices. (82a:82046)

Zaderej, N. N. Simultaneous approximation of periodic functions and their derivatives by de la Vallée-Poussin sums. (Russian) (82m:42005)

10Hxx Multiplicative theory

secondary classifications:

Davenport, Harold ★Multiplicative number theory. (82m:10001)

(Montgomery, Hugh L.) See Davenport, Harold, (82m:10001)

10H05 Riemann's zeta function, functional equation

Benedetto, John J. Fourier analysis of Riemann distributions and explicit formulas. 82c:10048

Čížek, Jiří On the proof of the prime number theorem. (Czech summary) 82m:10061

Fogels, E. K. On the zeros of Riemann's zeta function. (Russian) 82a:10042

Fujii, Akio A remark on the Riemann hypothesis. 82j:10056

On the zeros of Dirichlet L -functions. II. 82m:10062

Goss, David A simple approach to the analytic continuation and values at negative integers for Riemann's zeta function. 82e:10069

Heath-Brown, D. R. Fractional moments of the Riemann zeta function. 82h:10052

- Heath-Brown, Roger Mean value theorems for the Riemann zeta function. (See 82j:10094)
- Iwaniec, Henryk Fourier coefficients of cusp forms and the Riemann zeta-function. 82j:10047
- Karkoschka, E. (with Werner, P.) Einige Ausnahmen zur Rossserschen Regel in der Theorie der Riemannschen Zetafunktion. (English summary) 82j:10048
- Koecher, Max Letter. 82h:10049
- Lou, Shi Tuo (with Yao, Qi) Lower bound for zeros of Riemann's zeta function on $\sigma = \frac{1}{2}$. 82a:10043
- (with Yao, Qi) A lower bound for zeros of Riemann's zeta function on the line $\sigma = \frac{1}{2}$ (Chinese) 82m:10063
- Montgomery, Hugh L. The zeta function and prime numbers. 82k:10047
- Moser, Jan Proof of E. C. Titchmarsh's conjecture in the theory of the Riemann zeta function. (Russian) 82f:10053
- Pan, Cheng Biao A simplification of the proof of Levinson's theorem. (Chinese. English summary) 82e:10070
- Ramachandra, K. Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. I. 82f:10054a
- Some aspects of Dirichlet series. II. (See 82d:10005)
- Some aspects of Dirichlet series. (See 82j:10003)
- Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. III. 82f:10054c
- Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. II. 82f:10054b
- Richards, Ian On the normal density of primes in short intervals. 82c:10049
- Rieger, G. J. Über große Werte der Riemannschen Funktion ζ in Winkelräumen. 82j:10069
- Schneider, Peter Über die Werte der Riemannschen Zetafunktion an den ganzzahligen Stellen. 82g:10057
- Toyozumi, Masao Formulae for the values of zeta and L -functions at half integers. 82h:10053
- Werner, P. See Karkoschka, E., 82j:10048
- Yao, Qi See Lou, Shi Tuo, 82a:10043 and 82m:10063

secondary classifications:

- Bentz, Hans-J. Über den Primzahlsatz und explizite Formeln. (82h:10054)
- Cohen, Alan Max On improving convergence of alternating series. (82d:65005)
- Cohen, Henri Hypothèse de Riemann et formes automorphes de Maass. (82c:10030)
- Reich, Axel Werteverteilung von Zetafunktionen. (82h:10051)

10H08 Dirichlet L -function, functional equation

- Almay, Peter (with Brianti, Genesio, Jr.) L -series and the problem of the nonvanishing of L -functions. (Portuguese. English summary) 82k:10048
- Balasubramanian, R. A note on Dirichlet's L -functions. 82k:10049
- Brianti, Genesio, Jr. See Almay, Peter, 82k:10048
- Heath-Brown, D. R. The fourth power mean of Dirichlet's L -functions. 82j:10049
- Hoffstein, Jeffrey On the Siegel-Tatuzawa theorem. 82k:10050
- Hossain, Md. Fazlee $L(1, \chi) \neq 0$ for every real character χ . (Bengali summary) 82m:10064
- Jutila, Matti Statistical Deuring-Heilbronn phenomenon. 82j:10070
- On the mean value of $L(\frac{1}{2}, \chi)$ for real characters. 82m:10065
- Queffelec, Hervé Propriétés presque sûres et quasi-sûres des séries de Dirichlet et des produits d'Euler. 82c:10050
- Rane, V. V. A note on the mean value of L -series. 82j:10051
- Tahtadjan, L. A. See Vinogradov, A. I., 82b:10050
- Vinogradov, A. I. (with Tahtadjan, L. A.) On analogues of the Gauss-Vinogradov formula. (Russian) 82h:10050
- Walum, Herbert An exact formula for an average of L -series. 82m:10066
- Weinstein, Lenard The zeroes of functions related to Dirichlet L -functions. 82d:10056

secondary classifications:

- Fujii, Akio On the zeros of Dirichlet L -functions. II. (82m:10062)
- Good, Anton Beiträge zur Theorie der Dirichletreihen, die Spitzenformen zugeordnet sind. (English summary) (82c:10034)
- Gross, Benedict H. On the factorization of p -adic L -series. (82a:12010)
- Sturm, Jacob Special values of zeta functions, and Eisenstein series of half integral weight. (82h:10033a)
- Addendum to: "Special values of zeta functions, and Eisenstein series of half integral weight" [Amer. J. Math. 102 (1980), no. 2, 219-240]. (82h:10033b)
- Toyozumi, Masao Formulae for the values of zeta and L -functions at half integers. (82h:10053)

10H10 Other zeta functions [For local and global ground fields, see 12A70, 12A80, 12B30, 12B35; for algebro-geometric methods, see 14G10; see also 10C15, 10D40.]

- Abou-Tair, Ibrahim Alyan Youcif ★Eine spezielle Dirichletreihe. (German) [A special Dirichlet series] 82c:10051
- Hinz, Jürgen G. A mean value theorem for the Dedekind zeta function of a quadratic number field. 82c:10052
- Eine Erweiterung des nullstellenfreien Bereiches der Heckschen Zetafunktion und Primideale in Idealklassen. 82d:10057
- Kaufman, R. M. Estimate of the Hecke L -functions on the half line. (Russian. English summary) 82e:10071
- Lavrik, A. F. Laurent coefficients of a generalized zeta function. (Russian) 82j:10050
- Malik, A. If $L(\frac{1}{2}, \chi) > 0$, then $L(\frac{1}{2}, \chi)$ cannot be a minimum. 82j:10051
- Reich, Axel Werteverteilung von Zetafunktionen. 82h:10051

- Rosen, Kenneth H. L -series for genera at $s=1$. 82a:10044
- Stas, W. An explicit estimate for zeros of Dedekind zeta functions. 82a:10045
- Sušbaev, S. S. Extrema of five-dimensional Epstein zeta functions. (Russian) 82d:10058
- Wieczorkiewicz, Jan K. Some remarks on a result of A. V. Sokolovskij. 82h:10052

secondary classifications:

- Çallıalp, Fethi Non-nullité des fonctions zeta des corps quadratiques réels pour $0 < s < 1$. (English summary) (82h:12014)
- Goldfeld, Dorian On convolutions of nonholomorphic Eisenstein series. (82d:10040)
- Kung, Joseph P. S. (with Murty, M. Ram; Rota, Gian-Carlo) On the Rédei zeta function. (82c:06018)
- Murty, M. Ram See Kung, Joseph P. S.; et al., (82c:06018)
- Ramachandra, K. Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. I. (82f:10054a)
- Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. III. (82f:10054c)
- Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. II. (82f:10054b)
- Rota, Gian-Carlo See Kung, Joseph P. S.; et al., (82c:06018)
- Sušbaev, S. S. On the Rankin-Sobolev problem of the multidimensional zeta function (estimate of the origin of the ray of extremality of the principal perfect form). (Russian) (82f:10041)
- Yoshida, Hiroyuki On Artin L -functions. (82g:12012)

10H15 Distribution of primes and of integers with specified multiplicative properties

- Balog, A. An elementary Tauberian theorem and the prime number theorem. 82k:10052
- Bentz, Hans-J. (with Pintz, János) Quadratic residues and the distribution of prime numbers. 82e:10072
- Über den Primzahlsatz und explizite Formeln. 82h:10054
- Boas, R. P. The Skewes number. (See 82c:00006)
- Chen, W. W. L. On the error term of the prime number theorem and the difference between the number of primes in the residue classes modulo 4. 82g:10058
- De Koninck, Jean-Marie (with Erdős, Paul; Ivić, Aleksandar) Reciprocals of certain large additive functions. 82c:10053
- Elliott, Peter D. T. A. A remark on the Dirichlet values of a completely reducible polynomial (mod p). 82c:10073
- Erdős, Paul (with Sárközy, A.) On the number of prime factors in integers. 82c:10053
- See also De Koninck, Jean-Marie; et al., 82k:10053
- Fogels, E. K. On a hypothesis in the theory of prime numbers. (Russian) 82j:10052
- Fouvry, Etienne Un résultat voisin du théorème de Bombieri-Vinogradov. 82h:10055
- Gallagher, P. X. Some consequences of the Riemann hypothesis. 82j:10071
- Corrigendum: "On the distribution of primes in short intervals" [Mathematika 23 (1976), no. 1, 4-9; MR 53 #13140]. 82j:10072
- Golomb, Solomon W. The evidence for Fortune's conjecture. 82j:10053
- Graham, S. W. The distribution of squarefree numbers. 82j:10054
- The greatest prime factor of the integers in an interval. 82k:10054
- Huxley, Martin A note on large gaps between prime numbers. 82a:10046
- Ivić, Aleksandar On certain sums involving von Mangoldt's function in short intervals. 82g:10059
- See also De Koninck, Jean-Marie; et al., 82k:10053
- Jutila, Matti Distribution of primes in intervals and arithmetic progressions. 82k:10055
- Kaufman, R. M. Correction: "The distribution of (\sqrt{p}) " [Mat. Zametki 26 (1979), no. 4, 497-504; MR 81a:10055]. (Russian) 82g:10060
- Kolesnik, G. (with Straus, Ernst G.) On the distribution of integers with a given number of prime factors. 82c:10054
- Maier, Helmut Chains of large gaps between consecutive primes. 82g:10061
- Nair, Mohan A new method in the elementary theory of primes. (See 82m:10006)
- Newman, Donald J. Simple analytic proof of the prime number theorem. 82h:10056
- Odani, R. W. K. Généralisations du théorème de Landau sur les sommes de deux carrés: la méthode de fonctions fribeniennes. (See 82h:10001)
- Pintz, János See Bentz, Hans-J., 82e:10072
- Raitzin, Carlos Exact formulae for $\Pi(x)$ and the number of Goldbach's decompositions of an even integer. 82d:10059
- The exact count of the prime numbers that do not exceed a given upper bound. (Spanish) 82e:10074
- Rieger, G. J. Über Folgen gebrochener Potenzen. 82d:10060
- Roesler, Friedrich Zur Kongruenzklassen-Verteilung in Folgen von kleinen Zahlen, insbesondere von Primzahldifferenzen. 82h:10053
- Sárközy, A. See Erdős, Paul, 82c:10053
- Shiu, P. On the number of square-full integers between successive squares. 82j:10055
- Sita Ramaiah, V. See Suryanarayana, D., 82j:10056
- Straus, Ernst G. See Kolesnik, G., 82c:10054
- Subbarao, M. V. (with Suryanarayana, D.) Almost and nearly k -free integers. 82f:10055a
- (with Suryanarayana, D.) Corrections to: "Almost and nearly k -free integers". 82f:10055b
- Subrahmanyan, P. See Suryanarayana, D., 82g:10062
- Suryanarayana, D. On the orders of the error functions of the (k, r) and r -free integers. 82j:10073
- (with Sita Ramaiah, V.) Generalization of a problem of Evelyn-Linfoot and Page in additive number theory. 82j:10056
- (with Subrahmanyan, P.) The maximal k -full divisor of an integer. 82g:10062
- See also Subbarao, M. V., 82f:10055

secondary classifications:

- Čížek, Jiří On the proof of the prime number theorem. (Czech summary) (82m:10061)
- Friedlander, John B. Sifting short intervals. (82k:10058)

- Harborth, Heiko (with Kemnitz, Arnfried) Calculations for Bertrand's postulate. (82c:10001)
- Heath-Brown, D. R. Three primes and an almost-prime in arithmetic progression. (82j:10074)
- Kemnitz, Arnfried See Harborth, Heiko, (82c:10001)
- (Legendre, A.-M.) See Pintz, János, (82e:01055)
- Pintz, János On Legendre's prime number formula. (82e:01055)
- Richards, Ian On the normal density of primes in short intervals. (82c:10049)

10H20 Distribution in progressions and other sequences [See also 10L20.]

- Bentz, Hans-J. Primzahlen in arithmetischen Progressionen und explizite Formeln. (82f:10056)
- Deshouillers, Jean-Marc (with Diab, Ahmad) Sur la distribution modulo M des suites polynomiales $[P(n)]$. II. (82g:10063)
- Diab, Ahmad See Deshouillers, Jean-Marc, 82g:10063
- Fouvry, Etienne (with Iwaniec, Henryk) On a theorem of Bombieri-Vinogradov type. (82h:10057)
- Heath-Brown, D. R. Three primes and an almost-prime in arithmetic progression. (82j:10074)
- Huxley, Martin Estimating $\liminf(p_{n+r} - p_n)/\log p_n$. (See 82m:10006)
- Iwaniec, Henryk See Fouvry, Etienne, 82h:10057
- Subbarao, M. V. (with Suryanarayana, D.) On the set of integers of the form p^*m^k . (with Suryanarayana, D.) Corrections and additions to: "On the set of integers of the form p^*m^k " [Indian J. Math. 15 (1973), no. 3, 179-184; MR 82b:10054]. (82m:10067)
- Suryanarayana, D. See Subbarao, M. V., 82b:10054 and 82m:10067
- Tuljaganova, M. I. Multidimensional analogues of a problem of Luo Geng Hua. (Russian) (82i:10057)
- Vaughan, R. C. An elementary method in prime number theory. (82c:10055)
- Warlimont, Richard Squarefree numbers in arithmetic progressions. (82b:10055)
- Wirsing, E. Additive functions with restricted growth on the numbers of the form $p+1$. (82b:10056)

secondary classifications:

- Chen, W. W. L. On the error term of the prime number theorem and the difference between the number of primes in the residue classes modulo 4. (82g:10058)
- Jutila, Matti Distribution of primes in intervals and arithmetic progressions. (82k:10055)
- Roesler, Friedrich Zur Kongruenzklassen-Verteilung in Folgen von kleinen Zahlen, insbesondere von Primzahldifferenzen. (82b:10053)

10H22 Turán theory

secondary classifications:

- Esterle, Jean Le théorème taubérien de Wiener et l'équation de la chaleur. (82d:43002)
- Fogels, É. K. On the zeros of Riemann's zeta function. (Russian) (82a:10042)
- Gonek, S. M. A note on Turán's method. (82e:10068)

10H25 Asymptotic results on arithmetic functions

- Alladi, Krishnaswami The Moebius function and numbers with restricted prime factors. (82f:10057)
- On the probability that n and $\Omega(n)$ are relatively prime. (82j:10075)
- Čariev, U. Asymptotic estimation of sums of products of multiplicative and additive functions in terms of numbers with "large" prime divisors. (Russian. Tajiki summary) (82d:10061)
- Asymptotic expansion of the generalized problem of numbers with "small" and "large" prime divisors. (Russian. Tajiki summary) (82g:10064)
- Daboussi, Hédi Sur les fonctions multiplicatives ayant une valeur moyenne non nulle. (English summary) (82j:10076)
- De Koninck, Jean-Marie (with Ivić, Aleksandar) ★Topics in arithmetical functions. (82a:10047)
- Deshouillers, Jean-Marc La "nouvelle technique" de Hooley. (82b:10057)
- Edgors, Z. See Lavrik, A. F.; et al., 82e:10078
- Elliott, Peter D. T. A. Multiplicative functions and Ramanujan's τ -function. (82h:10058)
- Érgashev, V. É. Factorization of the numbers of an arithmetic progression. (Russian) (82b:10058)
- Fainleib, A. S. Tauberian theorems and mean values of multiplicative functions. (Russian. English summary) (82i:10058)
- Gafurov, N. G. On the sum of powers of the divisors of reducible quadratic polynomials. (Russian. Tajiki summary) (82g:10065)
- Hafner, James Lee New omega theorems for two classical lattice point problems. (82e:10076)
- Hall, R. R. On a conjecture of Erdős and Sárközy. (82b:10059)
- The maximum value of the divisor function on short intervals. (82e:10077)
- Heppner, Ernst Über benachbarte multiplikative zahlentheoretische Funktionen mehrerer Variabler. (82i:10059)
- Über Mittelwerte multiplikativer zahlentheoretischer Funktionen mehrerer Variabler. (English summary) (82i:10060)
- Hildebrand, Adolf (with Spilker, Jürgen) Charakterisierung der additiven, fast-geraden Funktionen. (English summary) (82g:10066)
- Israelov, M. I. See Lavrik, A. F.; et al., 82e:10078
- Ivić, Aleksandar Sum of reciprocals of the largest prime factor of an integer. (82g:10067)
- See also De Koninck, Jean-Marie, 82a:10047
- Jutila, Matti On a problem of Barban and Vehov. (82a:10048a)
- Corrigendum: "On a problem of Barban and Vehov". (82a:10048b)
- Kanemitsu, Shigeru Corrigenda to: "On some sums involving Farey fractions" [Math. J.

- Okayama Univ. 20 (1978), no. 2, 101-113; MR 80b:10062]. (82d:10062)
- Křížus, Z. The mean value of multiplicative functions and the distribution of values of real multiplicative functions. (Russian. Lithuanian and English summaries) (82a:10049)
- Lavrik, A. F. (with Israelov, M. I.; Edgors, Z.) Integrals containing the remainder term of the divisor problem. (Russian) (82e:10078)
- Lucht, Lutz Power series with multiplicative coefficients. (82g:10068)
- Mercier, Arnel Quelques identités arithmétiques. (82h:10059)
- Sommes de la forme $\sum g(n)/f(n)$. [Sums of the form $\sum g(n)/f(n)$] (82m:10068)
- Murty, G. Sri Rama Chandra (with Sitaramachandra Rao, R.) On M -void integers. (82i:10061)
- Nair, Mohan (with Shiu, P.) On some results of Erdős and Mirsky. (82b:10060)
- Narkiewicz, W. Normal order for a function associated with factorization into irreducibles. (82h:10060)
- Pan, Cheng Dong A new mean value theorem and its applications. (Chinese. English summary) (82a:10050)
- Pavlov, A. I. The number of solutions of the equation $x^k = a$ in the symmetric group S_n . (Russian) (82d:10063)
- Perelli, A. (with Salerno, S.) On the average order of multiplicative functions. (Italian summary) (82a:10051)
- Popov, V. N. Asymptotic behavior of the sum of sums of the elements of continued fractions for numbers of the type a/p . (Russian. English summary) (82a:10013)
- Salerno, S. See Perelli, A., 82a:10051
- Scourfield, E. J. On the coprimality of certain multiplicative functions. (82i:10062)
- Shiu, P. See Nair, Mohan, 82b:10060
- Sitaramachandra Rao, R. See Murty, G. Sri Rama Chandra, 82i:10061
- Sita Ramaiah, V. (with Suryanarayana, D.) Sums of reciprocals of some multiplicative functions. (82d:10064a)
- (with Suryanarayana, D.) Sums of reciprocals of some multiplicative functions. II. (82d:10064b)
- (with Suryanarayana, D.) An order result involving the σ -function. (82c:10056)
- Smith, Robert Arnold (with Subbarao, M. V.) The average number of divisors in an arithmetic progression. (82i:10063)
- Spilker, Jürgen See Hildebrand, Adolf, 82g:10066
- Subbarao, M. V. See Smith, Robert Arnold, 82i:10063
- Subramanyam, P. (with Suryanarayana, D.) The maximal k -full divisor of an integer. (82f:10058)
- Suryanarayana, D. Some more remarks on uniform O -estimate for k -free integers. (82m:10069)
- See also Sita Ramaiah, V., 82d:10064; Subramanyam, P., 82f:10058 and Sita Ramaiah, V., 82k:10056
- Tanaka, Minoru On the Möbius and allied functions. (82e:10079)
- Tenenbaum, Gérard Sur le procédé de sommation de Borel et la répartition du nombre des facteurs premiers des entiers. (82k:10057)
- Turk, J. W. M. Multiplicative properties of integers in short intervals. (82a:10052)

secondary classifications:

- Ahmad, Z. U. (with Siddiqui, Z. U.; Sitaramachandra Rao, R.; Murty, G. Sri Rama Chandra) The number of M -void divisors of an integer. (82g:10010)
- Balog, A. An elementary Tauberian theorem and the prime number theorem. (82k:10052)
- Elliott, Peter D. T. A. Recent results in the theory of arithmetic functions. (82k:10066)
- Hayashi, Elmer K. Omega theorems for the iterated additive convolution of a nonnegative arithmetic function. (82k:10067)
- Kubilius, J. Estimation of the remainder term in the central limit theorem for additive arithmetic functions. (Russian. Lithuanian and English summaries) (82a:10061)
- Murty, G. Sri Rama Chandra See Ahmad, Z. U.; et al., (82g:10010)
- Rane, V. V. A note on the mean value of L -series. (82k:10051)
- Ruzsa, I. Z. On the concentration of additive functions. (82j:10088)
- Siddiqui, Z. U. See Ahmad, Z. U.; et al., (82g:10010)
- Sitaramachandra Rao, R. See Ahmad, Z. U.; et al., (82g:10010)
- Sita Ramaiah, V. See Suryanarayana, D., (82i:10056)
- Stepanuskas, G. A local limit theorem for a class of arithmetical functions. (Russian. Lithuanian and German summaries) (82b:10075)
- Subbarao, M. V. (with Suryanarayana, D.) Almost and nearly k -free integers. (82f:10055a)
- (with Suryanarayana, D.) Corrections to: "Almost and nearly k -free integers". (82f:10055b)
- Subrahmanyam, P. See Suryanarayana, D., (82g:10062)
- Suryanarayana, D. On the orders of the error functions of the (k, r) and r -free integers. (82j:10073)
- (with Sita Ramaiah, V.) Generalization of a problem of Evelyn-Linfoot and Page in additive number theory. (82i:10056)
- (with Subrahmanyam, P.) The maximal k -full divisor of an integer. (82g:10062)
- See also Subbarao, M. V., (82f:10055)

10H26 Asymptotic results on counting functions for algebraic and topological structures

- Gogia, Sudesh K. (with Luthar, Indar S.) Norms from certain extensions of $F_q(T)$. (82i:10064)
- Graham, Ronald L. (with Li, Wen Ch'ing Winnie; Paul, Jerome L.) Homogeneous collinear sets in partitions of \mathbb{Z}^n . (82j:10077)
- Grotz, Wolfgang Einige Anwendungen der Siegelischen Summenformel. (82e:10080)
- Kritzel, Ekkehard Die Werteverteilung der Anzahl der nicht-isomorphen Abelschen Gruppen endlicher Ordnung in kurzen Intervallen. (82g:10069)
- Li, Wen Ch'ing Winnie See Graham, Ronald L.; et al., 82j:10077
- Luthar, Indar S. See Gogia, Sudesh K., 82i:10064
- Paul, Jerome L. See Graham, Ronald L.; et al., 82j:10077

secondary classifications:

- Ismatullaev, Š. A. Asymptotic behavior of the number of solutions of a Diophantine

equation. (Russian) (82i:10072)

Zadereĭ, N. N. Simultaneous approximation of periodic functions and their derivatives by de la Vallée-Poussin sums. (Russian) (82m:42005)

10H30 Sieves, upper and lower estimates

Chen, Jing Run On the distribution of almost primes in an interval. II. 82d:10065
On some problems in prime number theory. (See 82j:10004)

See also Deshouillers, Jean-Marc, 82b:10061

Deshouillers, Jean-Marc Progrès récents des petits cribles arithmétiques [d'après Jing Run Chen, Henryk Iwaniec, ...]. 82b:10061

Ding, Xia Xi Imbedding theorems and the large sieve method in algebraic number fields. (Chinese. English summary) 82d:10066

Eĭnshtanov, B. A. A generalization in the sieve method. (Russian. Tajiki summary) 82a:10053

Greaves, G. Weighted sieves. 82c:10081

Heath-Brown, D. R. Differences between consecutive primes. 82b:10064

Hensley, Douglas Corrigendum: "An almost-prime sieve" [J. Number Theory 10 (1978), no. 2, 250-262; MR 58 #557]. 82d:10067

Indlekofer, Karl-Heinz A mean-value theorem for multiplicative functions. 82d:10068

Iwaniec, Henryk On the Brun-Titchmarsh theorem and related questions. (See 82j:10003)

A new form of the error term in the linear sieve. 82d:10069
(with van de Lune, J.; te Riele, Herman J. J.) The limits of Buchstab's iteration sieve. 82a:10054

Sieving limits. (See 82j:10004)

See also Deshouillers, Jean-Marc, 82b:10061

Laborde, Marc Nombres presque-premiers dans des petits intervalles. 82b:10062

Buchstab's sifting weights. 82a:10070

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Makys, M. The "large sieve" in quadratic fields. (Russian. Lithuanian and English summaries) 82b:10063

Motokashi, Yoichi Le crible de Selberg. (See 82b:10004)

Pan, Cheng Biao On the upper bound of the number of ways to represent an even integer as a sum of two primes. 82j:10078

Rieger, G. J. Über Lipschitz-Folgen. 82a:10055

te Riele, Herman J. J. See Iwaniec, Henryk; et al., 82a:10054

Sokolovskii, A. V. Lower bounds in the "large sieve". (Russian. English summary) 82c:10082

Tenenbaum, Gérard Sur une technique en théorie analytique des nombres. 82i:10065

secondary classifications:

Eĭnshtanov, B. A. Application of the sieve method to the problem of determining the number of primes. (Russian. Tajiki summary) (82m:01001)

Erdős, Paul (with Sárközy, A.) On the number of prime factors in integers. (82c:10053)

Graham, S. W. (with Vaaler, Jeffrey D.) A class of extremal functions for the Fourier transform. (82d:42008)

Greaves, G. An algorithm for the solution of certain differential-difference equations of advanced type. (82m:65124)

(Iwaniec, Henryk) See Schinzel, Andrzej, (82f:01140)

Sárközy, A. See Erdős, Paul, (82c:10053)

Schinzel, Andrzej The papers of Henryk Iwaniec on the sieve method in number theory. (Polish) (82f:01140)

Vaaler, Jeffrey D. See Graham, S. W., (82i:42008)

10H32 Applications of sieve methods

Friedlander, John B. Sifting short intervals. 82b:10058

Murata, Leo An average type result on the number of primes satisfying generalized Wieferich condition. 82m:10071

Narlikar, M. J. (with Ramachandra, K.) Contributions to the Erdős-Szemerédi theory of sieved integers. 82m:10072

Ramachandra, K. See Narlikar, M. J., 82m:10072

secondary classifications:

(Chen, Jing Run) See Deshouillers, Jean-Marc, (82b:10061)

Deshouillers, Jean-Marc Progrès récents des petits cribles arithmétiques [d'après Jing Run Chen, Henryk Iwaniec, ...]. (82b:10061)

Fourry, Etienne Un résultat voisin du théorème de Bombieri-Vinogradov. (82b:10055)

Graham, S. W. The greatest prime factor of the integers in an interval. (82k:10054)

Heath-Brown, D. R. Representation of an integer as a prime plus a product of two small factors. (82b:10067)

Huxley, Martin Estimating $\liminf(p_{n+1} - p_n)/\log p_n$. (See 82m:10006)

Iwaniec, Henryk On sums of two norms from cubic fields. (82g:10038)

See also Deshouillers, Jean-Marc, (82b:10061)

Jutila, Matti Distribution of primes in intervals and arithmetic progressions. (82k:10055)

Pan, Cheng Dong A new mean value theorem and its applications. (Chinese. English summary) (82a:10050)

10H35 Distribution of residue classes (primitive roots, power residues, etc.)

Egami, Shigeki The distribution of residue classes modulo a in an algebraic number field. 82d:10070

Grosswald, Emil On Burgess' bound for primitive roots modulo primes and an application to $\Gamma(p)$. 82k:10059

secondary classifications:

Chowla, Sarvadaman (with Cowles, M.; Cowles, John R.) On the difference of cubes (mod p). (82c:10002)

Cowles, John R. See Chowla, Sarvadaman; et al., (82c:10002)

Cowles, M. See Chowla, Sarvadaman; et al., (82c:10002)

Hossain, Md. Fazlee Least upper bound of the number of quadratic residue in interval modulo p . (Bengali summary) (82m:10007)

Narkiewicz, W. Euler's function and the sum of divisors. (82g:10077)

Somer, Lawrence The residues of n^a modulo p . (82g:10007)

10H40 Generalized primes and integers

Borel, Jean-Pierre Quelques résultats d'équipartition liés aux nombres premiers généralisés de Beurling. 82b:10060

10H45 Almost-periodic number-theoretic functions [See also 10K35.]

Reich, Axel Eulerprodukte und diskrete Mittelwerte. (English summary) 82a:10056

Spilker, Jürgen Ramanujan expansions of bounded arithmetic functions. 82g:10070

secondary classifications:

Coquet, Jean Sur la mesure spectrale des suites multiplicatives. (English summary) (82a:10064)

Hildebrand, Adolf (with Spilker, Jürgen) Charakterisierung der additiven, fast-geraden Funktionen. (English summary) (82g:10066)

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10H99 None of the above, but in this section

Elliott, Peter D. T. A. On the differences of additive functions. II. 82g:10071

Erdős, Paul (with Tenenbaum, Gérard) Sur la structure de la suite des diviseurs d'un entier. (English summary) 82b:10061

Gruman, Lawrence Propriétés arithmétiques des fonctions entières. (English summary) 82g:10072

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Ramanathan, K. G. (with Subbarao, M. V.) Some generalizations of Ramanujan's sum. (82c:10067)

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Wirsing, E. Additive functions with restricted growth on the numbers of the form $p+1$. (82b:10056)

10Jxx Additive theory

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Bordeaux ★Journées de Théorie Additive des Nombres. (French) [Conference on

Additive Number Theory] 82d:10004

Conference:

Additive Number Theory ★Journées de Théorie Additive des Nombres. (French)

[Conference on Additive Number Theory] 82d:10004

secondary classifications:

Postnikov, A. G. Tauberian theory and its applications. (Russian) (82f:40012a)

Tauberian theory and its applications. (82f:40012b)

10J05 Sums of squares

Car, Mireille La méthode des sommes trigonométriques pour $F_q[X]$. 82b:10061

Erdős, Paul (with Nathanson, Melvyn B.) Lagrange's theorem and thin subsequences of squares. 82b:10062

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Rieger, G. J. Zu einem Satz von Estermann über Summen von Quadraten quadratfreier Zahlen. 82b:10083

Taussky, Olga Pairs of sums of three squares of integers whose product has the same property. 82m:10073

secondary classifications:

Allouche, Jean-Paul Vibrations de classe $C^{1/2}$ des tores plats de dimension s et théorie des nombres. (82f:35113)

Estes, Dennis R. (with Taussky, Olga) Remarks concerning sums of three squares and quaternion commutator identities. (82a:10068)

Prestel, Alexander Sums of squares over fields. (82a:12014)

Pu, Fu Ke Density of states, Poisson's formula of summation and Walfisz's formula. (82d:82014)

Sorenson, Peter Sums of two integral squares in certain cyclotomic number fields. II. (82j:12008)

Taussky, Olga See Estes, Dennis R., (82a:10068)

Walker, P. L. The Mellin transform of the partial fraction expansion for $\theta(x)$. (82i:10028)

10J06 Sums of higher powers

Bohman, Jan (with Fröberg, Carl-Erik) Numerical investigation of Waring's problem for cubes. 82k:10063

Bredihin, B. M. (with Grišina, T. I.) The smoothing method in problems of Waring type. (Russian) 82j:10079

Fröberg, Carl-Erik See Bohman, Jan, 82k:10063

Gritina, T. I. See Bredihin, B. M. 82j:10079

Laborde, Marc. Equirépartition des solutions du problème de Waring. 82i:10066

Lachaud, Gilles. Une présentation adéquate de la série singulière et du problème de Waring. 82i:10067

Thanigasalam, K. On Waring's problem. 82b:10065

Wright, E. M. The Tarry-Escott and the "easier" Waring problems. 82i:10059

secondary classifications:

Schwarz, Wolfgang. Survey on analogues of the Waring problem: Diophantine inequalities. (82g:10039)

10J10 Applications of Hardy-Littlewood method [See also 10B35.]

Arhipov, G. I. The values of a singular series in a Hilbert-Kamke problem. (Russian) 82i:10064

Freedman, Willi. See Müller, Claus, 82d:10071

Müller, Claus (with Freedman, Willi). Multidimensional Euler and Poisson summation formulas. 82d:10071

Vaughan, R. C. A ternary additive problem. 82b:10066

secondary classifications:

Mozzochi, C. J. An analytic sufficiency condition for Goldbach's conjecture with minimal redundancy. (82b:10068)

An analytic sufficiency condition for Goldbach's conjecture with minimal redundancy. II. (82j:10080)

Plaksin, V. A. Representation of numbers by the sum of four squares of integers, two of which are prime numbers. (Russian) (82b:10027)

Rieger, G. J. Zu einem Satz von Estermann über Summen von Quadraten quadratfreier Zahlen. (82e:10083)

Sulakvelidze, L. A. Representation of numbers by positive ternary quadratic forms. I. (Russian. Georgian and English summaries) (82j:10039a)

Representation of numbers by positive ternary quadratic forms. II. (Russian. Georgian and English summaries) (82j:10039b)

10J15 Additive questions involving primes

Aidarova, L. K. Representation of almost all numbers in the form of a sum of a prime and a given polynomial. (Russian) 82i:10065

Bredihin, B. M. A heuristic principle in the additive theory of primes. (Russian) 82e:10084

Chen, Jing Run (with Pan, Cheng Dong). The exceptional set of Goldbach numbers. I. 82f:10060

Fouvry, Etienne. Le problème de Goldbach par la méthode du cercle. 82g:10074

Heath-Brown, D. R. Representation of an integer as a prime plus a product of two small factors. 82b:10067

Lou, Shi Tuo (with Yao, Qi). The exceptional set of Goldbach numbers in a short interval. (Chinese) 82i:10068

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Mozzochi, C. J. A comment on Goldbach's conjecture. 82a:10057

An analytic sufficiency condition for Goldbach's conjecture with minimal redundancy. 82b:10068

An analytic sufficiency condition for Goldbach's conjecture with minimal redundancy. II. 82j:10080

Pan, Cheng Dong. See Chen, Jing Run, 82f:10060

Srinivasan, Seshadri. Some remarks on $ap + \beta q$. 82c:10085

Tatzawa, Tikao. See Mitsui, Takayoshi, 82m:10074

Yao, Qi. See Lou, Shi Tuo, 82i:10068

secondary classifications:

Chen, Jing Run. On some problems in prime number theory. (See 82j:10004)

Forrest, J. See Light, William A.; et al., (82h:10003)

Hammond, N. See Light, William A.; et al., (82h:10003)

Heath-Brown, D. R. Differences between consecutive primes. (82b:10064)

Huxley, Martin. Estimating $\liminf(p_{n+1} - p_n)/\log p_n$. (See 82m:10006)

Light, William A. (with Forrest, J.; Hammond, N.; Roe, S.) A note on Goldbach's conjecture. (82h:10003)

Pan, Cheng Biao. On the upper bound of the number of ways to represent an even integer as a sum of two primes. (82j:10078)

Roe, S. See Light, William A.; et al., (82h:10003)

Roesler, Friedrich. Zur Kongruenzklassen-Verteilung in Folgen von kleinen Zahlen, insbesondere von Primzahlindifferenzen. (82b:10053)

10J20 Analytic work on partitions [See also 10A45.]

Gehuk, J. L. An Abel-Tauber theorem for partitions. 82k:10066

Kanehwa, Ryuji. Errata for: "An asymptotic formula for Cayley's double partition function $p(2; n)$ " [Tokyo J. Math. 2 (1979), no. 1, 137-158; MR 81c:10059]. 82a:10058

Richmond, L. Bruce (with Szekeres, G.). On the transformation equation for the partition generating function. 82j:10081

Szekeres, G. See Richmond, L. Bruce, 82j:10081

secondary classifications:

Barouch, E. On the Ising model in the presence of magnetic field. (82b:82071)

Fiala, Jiří. Srinivasa Ramanujan and the world of beautiful formulas. (Czech) (82e:01074)

Garsia, Adriano M. A q -analogue of the Lagrange inversion formula. (82m:05010)

Gordon, Basil (with Houten, Lorne). Notes on plane partitions. VI. (82d:05017)

Houten, Lorne. See Gordon, Basil, (82d:05017)

Lepowsky, James (with Milne, Stephen C.). Lie algebraic approaches to classical partition identities. (82f:17005)

Milne, Stephen C. See Lepowsky, James, (82f:17005)

Raitzin, Carlos. Memoir on Dirichlet series and the analytic representation of arithmetic functions. (Spanish) (82c:10075)

(Ramanujan, Srinivasa) See Fiala, Jiří, (82e:01074)

Sita Ramaiah, V. See Suryanarayana, D., (82i:10056)

Suryanarayana, D. (with Sita Ramaiah, V.). Generalization of a problem of Evelyn-Linfoot and Page in additive number theory. (82i:10056)

10J25 Lattice points in large regions

Nowak, Werner Georg. Einige Verallgemeinerungen des Gaußschen Kreisproblems. 82e:10086

Ein dreidimensionales Gitterpunktproblem. (English summary) 82f:10061

Gitterpunkte in Bereichen $x^2 + y^2 \leq R$, $x \geq 0$, $y \geq 0$. (English summary) 82b:10069

Randol, Burton. A Dirichlet series of eigenvalue type with applications to asymptotic estimates. 82j:10082

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secondary classifications:

Bérard, Pierre H. (with Besson, G.). Spectres et groupes cristalllographiques. II. Domaines sphériques. (82e:58097b)

Spectres et groupes cristalllographiques. I. Domaines euclidiens. (82e:58097a)

Besson, G. See Bérard, Pierre H., (82e:58097b)

Cahn, Robert S. (with Taylor, Michael E.). Asymptotic behavior of multiplicities of representations of compact groups. (82d:22013)

Dlubek, Helga (with Friedrich, Thomas). Spektraleigenschaften des Dirac-Operators—die Fundamentallösung seiner Wärmeleitungsgleichung und die Asymptotenentwicklung der Zeta-Funktion. (82g:58087)

Friedrich, Thomas. See Dlubek, Helga, (82g:58087)

Graham, Ronald L. (with Li, Wen Ch'ing Winnie; Paul, Jerome L.). Homogeneous collinear sets in partitions of \mathbb{Z}^n . (82j:10077)

Günther, Paul. Gitterpunktprobleme in symmetrischen Riemannschen Räumen vom Rang 1. (82b:58098)

Hafner, James Lee. New omega theorems for two classical lattice point problems. (82b:58096)

Ivanov, A. V. Two-sided and one-sided Liouville theorems for quasilinear elliptic equations of nondivergence type. (Russian) (82j:35056)

Li, Wen Ch'ing Winnie. See Graham, Ronald L.; et al., (82j:10077)

Malyšev, A. V. On the application of the discrete ergodic method in analytic arithmetic of indefinite ternary quadratic forms. (Russian) (82b:10024)

Paul, Jerome L. See Graham, Ronald L.; et al., (82j:10077)

Taylor, Michael E. See Cahn, Robert S., (82d:22013)

Vignéras, Marie-France. Variétés riemanniennes isospectrales et non isométriques. (82b:58102)

10J99 None of the above, but in this section

Buzyckii, P. L. (with Freiman, G. A.). On the possibilities of solving combinatorial problems by analytic methods. 82m:10075

Deshouillers, Jean-Marc. Théorie additive et géométrie des nombres. [Additive number theory and geometry of numbers.] (See 82m:10006)

Freiman, G. A. See Buzyckii, P. L., 82m:10075

Hayashi, Elmer K. Omega theorems for the iterated additive convolution of a nonnegative arithmetic function. 82k:10067

Shapiro, Harold N. A combinatorial problem in additive number theory. 82c:10056

secondary classifications:

Erdős, Paul (with Smith, B.). Finite abelian group cohesion. (82m:20057)

Rogers, D. G. Addition theorems for perfect systems of difference sets. (82b:10067)

Sidorov, N. V. Distribution of components of the total spin in the vector-spherical model. (Russian. English summary) (82c:82025)

Smith, B. See Erdős, Paul, (82m:20057)

10Kxx Probabilistic theory; measure, dimension, etc.

10K05 Distribution modulo one [See also 10F40.]

Borel, Jean-Pierre. Un problème d'équirépartition modulo 1 lié aux partitions. (English summary) 82g:10075

Choquet, Gustave. Algorithmes adaptés aux suites $(k\theta^n)$ et aux chaînes associées. (English summary) 82h:10062a

θ -jeux récursifs et application aux suites $(k\theta^n)$; solénoïdes de $T^{\mathbb{Z}}$. (English summary) 82h:10062b

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Chung, F. R. K. (with Graham, Ronald L.). On irregularities of distribution of real sequences. 82g:10076

- Coquet, Jean Une remarque sur les suites équiréparties à croissance lente. 82a:10059
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 Types de répartition complète des suites. (English summary) 82b:10071
- Deshouillers, Jean-Marc Sur la répartition modulo 1 des puissances d'un élément de $F_q((X))$. [On the modulo 1 distribution of the powers of an element $F_q((X))$] (See 82j:10003)
- La répartition modulo 1 des puissances de rationnels dans l'anneau des séries formelles sur un corps fini. 82i:10062
- Dupain, Yves (with Grekos, Georges) Densités des sous-suites équiréparties d'une suite donnée. 82j:10084
 (with Sós, Vera T.) On the one-sided boundedness of discrepancy-function of the sequence $\{n\alpha\}$. 82c:10058
- Faure, Henri Discrepances de suites associées à un système de numération (en dimension un). (English summary) 82i:10069
- Graham, Ronald L. See Chung, F. R. K., 82j:10076
- Grekos, Georges See Dupain, Yves, 82j:10084
- Horbowicz, Józef Criteria for uniform distribution. 82k:10068
- Kano, Takeshi Sur la théorie de l'équirépartition mod 1. (See 82b:10004)
- Losert, Viktor Équirépartition des suites définies par des semi-groupes additifs. (English summary) 82c:10087
- de Mathan, Bernard Un ensemble exceptionnel pour un problème de répartition modulo 1. 82c:10059
- Numbers contravening a condition in density modulo 1. 82c:10088
- Narkiewicz, W. Euler's function and the sum of divisors. 82j:10077
- Ostrowski, Alexander On the distribution function of certain sequences (mod 1). 82d:10073
- Pollington, Andrew Douglas Progressions arithmétiques généralisées et le problème des $(\frac{1}{2})^n$. (English summary) 82c:10060
- Sós, Vera T. See Dupain, Yves, 82j:10084
- Taschner, Rudolf J. Der Differenzensatz von van der Corput und gleichverteilte Funktionen. 82c:10089
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- Teuffel, Erich Einige asymptotische Eigenschaften der Quadratwurzelschnecke. 82j:10085
- Tichy, Robert F. Ein metrischer Satz in der Theorie der Gleichverteilung. 82c:10061
- Tijdeman, R. (with Voorhoeve, M.) Bounded discrepancy sets. 82i:10071
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secondary classifications:

- Adler, Roy (with Keane, Michael S.; Smorodinsky, Meir) A construction of a normal number for the continued fraction transformation. (82k:10070)
- Calpin, David Distributions of random binary sequences. (Czech summary) (82d:60024)
- Ellis, Martin H. (with Steele, J. Michael) Fast sorting of Weyl sequences using comparisons. (82k:68030)
- Ermine, Jean-Louis Courants ergodiques et répartition géométrique. (82b:58010)
- It'jasov, I. I. An estimate of a sum of fractional parts. (Russian) (82f:10052)
- Keane, Michael S. See Adler, Roy; et al., (82k:10070)
- Nowak, Werner Georg Gitterpunkte in Bereichen $x^n + y^m < R$, $x > 0$, $y > 0$. (English summary) (82b:10069)
- Osgood, Charles F. Approximating convolution products better than the DFT while keeping the FFT. (82i:65083)
- Pollington, Andrew Douglas The Hausdorff dimension of certain sets related to sequences which are not dense mod 1. (82a:10065)
- Ramshaw, Lyle On the discrepancy of the sequence formed by the multiples of an irrational number. (82k:10071)
- Rauzy, Gérard Itération des endomorphismes d'un intervalle. [Iteration of the endomorphisms of an interval] (See 82j:10004)
- Smorodinsky, Meir See Adler, Roy; et al., (82k:10070)
- Steele, J. Michael See Ellis, Martin H., (82k:68030)
- Wang, Yuan See Zhang, Yong Xiao; et al., (82i:65018)
- Xu, Guang Shan See Zhang, Yong Xiao; et al., (82i:65018)
- Zaremba, Stanisław Krystyn Gleichverteilung, gute Gitterpunkte und Integration durch Monte-Carlo Methoden. (82d:65007)
- Zhang, Yong Xiao (with Xu, Guang Shan; Wang, Yuan) A number-theoretic method for numerical integration in high dimensions. (Chinese) (82i:65018)

10K10 Algorithms and expansions [See also 10A30, 10F20.]

- Adams, William W. On a relationship between the convergents of the nearest integer and regular continued fractions. 82j:10078
- Dávid, Arnold (with Dvořák, Stanislav) The estimations of the limit of the geometric means of Lüroth's digits. (Slovak and Russian summaries) 82c:10062
- Dvořák, Stanislav See Dávid, Arnold, 82c:10062
- Ito, Shunji See Tanaka, Shigeru, 82j:10086
- Marion, Jacques Dimension de Hausdorff et fractions continues. (English summary) 82b:10073
- Mendes-France, Michel Algebraic numbers and automata theory. (See 82j:10003)
- Nakada, Hitoshi On the invariant measures and the entropies for continued fraction transformations. 82b:10074
- Rauzy, Gérard Échanges d'intervalles et transformations induites. 82m:10076
- Rockett, Andrew M. The metrical theory of continued fractions to the nearest integer. 82d:10074
- Tanaka, Shigeru (with Ito, Shunji) On a family of continued-fraction transformations and their ergodic properties. 82j:10086

secondary classifications:

- Furstenberg, H. ★Recurrence in ergodic theory and combinatorial number theory. (82j:28010)
- Hofbauer, Franz The maximal measure for linear mod one transformations. (82c:28040)
- Laurent, Michel Exemples d'ensembles de multiplicité. (English summary) (82c:43007)
- Pangratz, Heinrich (with Weinrichter, Hans) Pseudorandom number generator based on binary and quinary maximal-length sequences. (82j:65002)
- Pavlov, A. I. Limit distribution of the number of cycles and of the logarithm of order of a class of permutations. (Russian) (82b:60025)
- Peters, James V. An equivalent form of Benford's law. (82k:60024)
- Schweiger, Fritz An estimate for the length of a finite Jacobi algorithm. (82j:10059)
 Ergodic properties of fibered systems. (82k:28019)
- Series, Caroline On coding geodesics with continued fractions. (82b:30052)
- Shamir, Adi On the generation of cryptographically strong pseudorandom sequences. (82m:65007)
- Thaler, Maximilian Estimates of the invariant densities of endomorphisms with indifferent fixed points. (82f:28021)
- Vallander, S. S. One system of automata with local interactions. (82m:68100)
- Varol, Y. L. On a subset of all the permutations of n marks. (82j:68053)
- Weinrichter, Hans See Pangratz, Heinrich, (82j:65002)

10K15 Diophantine approximation [See also 10Fxx.]

- Bernik, V. I. The Baker-Schmidt conjecture. (Ukrainian. Russian summary) 82j:10079
 (with Želudevič, F. F.) On integral polynomials that assume small values on a certain interval. (Russian. English summary) 82k:10069
- Kaufman, Robert P. Continued fractions and Fourier transforms. 82b:10065
- Meľničuk, Ju. V. Hausdorff dimension in Diophantine approximations on curves. (Ukrainian. Russian summary) 82j:10087
- Yu, Kun Rui Two results in metrical Diophantine approximation. (See 82m:10006)
- Želudevič, F. F. See Bernik, V. I., 82k:10069

secondary classifications:

- Adams, William W. On a relationship between the convergents of the nearest integer and regular continued fractions. (82j:10078)
- Vil'činskii, V. T. On simultaneous approximations by irreducible fractions. (Russian. English summary) (82j:10058)

10K20 Arithmetic functions

- Babu, Guttu Jogesh On the distributions of multiplicative functions. 82a:10060
- Elliott, Peter D. T. A. Recent results in the theory of arithmetic functions. 82b:10066
- Ismatullayev, S. A. Asymptotic behavior of the number of solutions of a Diophantine equation. (Russian) 82i:10072
- Kubilius, J. Probability-theoretic problems of the distribution of arithmetical functions. (Russian) 82i:10073
 Estimation of the remainder term in the central limit theorem for additive arithmetic functions. (Russian. Lithuanian and English summaries) 82a:10061
- Maclaure, Jean-Loup Suites limite-périodiques et théorie des nombres. I. 82d:10075a
 Suites limite-périodiques et théorie des nombres. II. 82d:10075b
 Suites limite-périodiques et théorie des nombres. III. 82d:10075c
- Meyer, Jacques Ensembles d'unicité pour les fonctions additives. Étude analogue dans le cas des fonctions multiplicatives. 82m:10077
- Ruzsa, I. Z. On the concentration of additive functions. 82j:10088
- Stepanauskas, G. A local limit theorem for a class of arithmetical functions. (Russian. Lithuanian and German summaries) 82b:10075

secondary classifications:

- Elliott, Peter D. T. A. ★Probabilistic number theory. I. (82b:10002a)
 ★Probabilistic number theory. II. (82b:10002b)
 On the differences of additive functions. II. (82j:10071)
- Ėžov, Ė. Ė. The Euler formula in number theory and its generalization. (Russian. English summary) (82j:10008)

10K25 Normal numbers

- Adler, Roy (with Keane, Michael S.; Smorodinsky, Meir) A construction of a normal number for the continued fraction transformation. 82k:10070
- Keane, Michael S. See Adler, Roy; et al., 82k:10070
- Smorodinsky, Meir See Adler, Roy; et al., 82k:10070
- Volkman, Bodo On modifying constructed normal numbers. (French summary) 82a:10062

10K30 Irregularities of distribution

- Béjani, Robert Minoration de la discrédence à l'origine d'une suite quelconque. (English summary) 82b:10076
 Sur une constante liée à la discrédence des suites. (See 82b:10001)
- Buttsworth, R. N. On the probability that given polynomials have a specified highest common factor. 82c:10091
- Hellekalek, Peter On regularities of the distribution of special sequences. 82a:10063
- Ramshaw, Lyle On the discrepancy of the sequence formed by the multiples of an irrational number. 82k:10071
- Roth, K. F. On irregularities of distribution. IV. 82f:10063
- Stewart, M. Irregularities of uniform distribution. 82k:10072

secondary classifications:

- Dupain, Yves (with Sós, Vera T.) On the one-sided boundedness of discrepancy-function of the sequence $\{n\alpha\}$. (82c:10058)

- Gallagher, P. X. Some consequences of the Riemann hypothesis. (82j:10071)
 Sós, Vera T. See Dupain, Yves. (82c:10058)
 Usol'cev, L. P. An unimprovable estimate for the rate of convergence to the normal law and the asymptotic behavior of large deviations in a special case of the Fortet-Katz theorem. (Russian) (82a:60037)

10K35 Harmonic analysis and almost periodicity [See also 10H45.]

- Coquet, Jean Sur la mesure spectrale des suites multiplicatives. (English summary) 82a:10064
 Sur certaines suites pseudo-aléatoires. III. (English summary) 82d:10072
 Daboussi, Hédi Caractérisation des fonctions multiplicatives p.p. B^A à spectre non vide. 82f:10064
 Maucclair, Jean-Loup Fonctions arithmétiques et analyse harmonique. (See 82h:10004)
 secondary classifications:

- Spilker, Jürgen Ramanujan expansions of bounded arithmetic functions. (82g:10070)

10K40 Non-Archimedean theory

10K50 Measure; Hausdorff dimension

- Mendès-France, Michel (with Tenenbaum, Gérald) Dimension des courbes planes, papiers pliés et suites de Rudin-Shapiro. (English summary) 82k:10073
 Peyrière, Jacques Substitutions aléatoires itérées. [Iterated random substitutions] (See 82m:10066)
 Pollington, Andrew Douglas The Hausdorff dimension of certain sets related to sequences which are not dense mod 1. 82a:10065
 Smyth, C. J. On measures of polynomials in several variables. 82k:10074
 Tenenbaum, Gérald See Mendès-France, Michel. 82k:10073
 Yu, Kun Rui Hausdorff dimension and simultaneous rational approximation. 82k:10075
 secondary classifications:

- Choquet, Gustave θ -fermés et dimension de Hausdorff. Conjectures de travail. Arithmétique des θ -cycles (où $\theta = 3/2$). (English summary) (82c:10057)
 Erdős, Paul Some remarks on subgroups of real numbers. (82c:04004)
 Furstenberg, H. (with Katznelson, Yitzhak) An ergodic Szemerédi theorem for commuting transformations. (82c:28032)
 Katznelson, Yitzhak See Furstenberg, H. (82c:28032)
 Marion, Jacques Dimension de Hausdorff et fractions continues. (English summary) (82b:10073)
 Yu, Kun Rui Two results in metrical Diophantine approximation. (See 82m:10066)

10K99 None of the above, but in this section

- Christol, Gilles (with Kamae, Teturo; Mendès-France, Michel; Rauzy, Gérard) Suites algébriques, automates et substitutions. (English summary) 82e:10092
 Kamae, Teturo See Christol, Gilles; et al. 82e:10092
 Kaufman, Robert P. On the approximation of lacunary series by Brownian motion. 82f:10065
 Ljašenko, N. N. On the asymptotic behavior of an arithmetical process. (Russian. English summary) 82f:10066
 Mendès-France, Michel See Christol, Gilles; et al. 82e:10092
 Rauzy, Gérard See Christol, Gilles; et al. 82e:10092

secondary classifications:

- Dubrovin, V. T. See Gabbasov, F. G., (82d:60030)
 Erdős, Paul (with Nathanson, Melvyn B.) Lagrange's theorem and thin subsequences of squares. (82k:10062)
 Fomin, A. S. An arithmetical method of proof of a local theorem for series of independent integer random vectors. (Russian) (82a:60026)
 Gabbasov, F. G. (with Dubrovin, V. T.) The probability of a normalized sum of weakly dependent vectors to be in the exterior of a convex set. (Russian) (82d:60030)
 Herlestam, Tore A note on Rabin's probabilistic primality test. (82g:10003)
 Keane, Michael S. (with Rauzy, Gérard) Stricte ergodicité des échanges d'intervalles. (82d:28014)
 Nathanson, Melvyn B. See Erdős, Paul. (82k:10062)
 Rauzy, Gérard See Keane, Michael S. (82d:28014)

10Lxx Sequences of integers

10L02 Density of sum sets, analogues and generalizations

- Erdős, Paul (with Sárközy, A.) On differences and sums of integers. II. 82m:10079 (with Sárközy, A.) On differences and sums of integers. I. 82m:10078
 Grekos, George P. Nonexistence of maximal asymptotic union nonbases. (French summary) 82c:10063
 Sárközy, A. On a theorem of Erdős and Fuchs. 82a:10066
 See also Erdős, Paul, 82m:10078 and 82m:10079

secondary classifications:

- Erdős, Paul (with Szemerédi, Endre) Remarks on a problem of the *American Mathematical Monthly*. (Hungarian) (82c:10066)
 Furstenberg, H. (with Katznelson, Yitzhak) An ergodic Szemerédi theorem for commuting transformations. (82c:28032)
 Katznelson, Yitzhak See Furstenberg, H. (82c:28032)
 Szemerédi, Endre See Erdős, Paul. (82c:10066)

10L05 Addition of sequences, additive bases [See also 05B10.]

- Dressler, Robert E. On sets which contain sum sets. 82d:10076
 Erdős, Paul (with Graham, Ronald L.) On bases with an exact order. 82e:10093
 Some applications of Ramsey's theorem to additive number theory. 82a:10067
 Graham, Ronald L. (with Sloane, N. J. A.) On constant weight codes and harmonious graphs. 82f:10067b
 (with Sloane, N. J. A.) On additive bases and harmonious graphs. 82f:10067a
 See also Erdős, Paul, 82e:10093
 Klove, Torleiv A class of symmetric 2-bases. 82e:10094
 Mossige, Svein Algorithms for computing the h -range of the postage stamp problem. 82e:10095
 Pippenger, Nicholas On the evaluation of powers and monomials. 82c:10064
 Rogers, D. G. Addition theorems for perfect systems of difference sets. 82h:10067
 Sloane, N. J. A. See Graham, Ronald L., 82f:10067a and 82f:10067b

secondary classifications:

- Cherly, J. On complementary sets of group elements. (82j:20095)
 Downey, Peter (with Leong, Benton; Sethi, Ravi) Computing sequences with addition chains. (82h:68064)
 Grekos, George P. Nonexistence of maximal asymptotic union nonbases. (French summary) (82c:10063)
 Hoggatt, Vermer E., Jr. See Silva, Anne. (82e:10018)
 Leong, Benton See Downey, Peter; et al. (82h:68064)
 Sethi, Ravi See Downey, Peter; et al. (82h:68064)
 Silva, Anne (with Hoggatt, Vermer E., Jr.) Generalized Fibonacci numbers. (82e:10018)

10L10 Special sequences (density, multiplicative, additive and other properties)

- Beck, József Balancing families of integer sequences. 82m:10080
 Boshernitzan, Michael (with Fraenkel, Aviezri S.) Nonhomogeneous spectra of numbers. 82d:10077
 de Bruijn, N. G. Sequences of zeros and ones generated by special production rules. 82i:10074
 Erdős, Paul (with Hardy, G. E.; Subbarao, M. V.) On the Schnirelmann density of k -free integers. 82j:10089
 (with Hall, R. R.) On the Möbius function. 82c:10065
 (with Szemerédi, Endre) Remarks on a problem of the *American Mathematical Monthly*. (Hungarian) 82c:10066
 On some problems in number theory. (See 82j:10004)
 Fraenkel, Aviezri S. See Boshernitzan, Michael. 82d:10077
 Freedman, A. R. (with Sember, J. J.) Densities and summability. 82m:10081
 Garner, Lynn E. On the Collatz $3n+1$ algorithm. 82j:10090
 Hall, R. R. The divisor density of integer sequences. 82h:10068
 See also Erdős, Paul, 82c:10065
 Hardy, G. E. See Erdős, Paul; et al. 82j:10089
 Kemp, Paula On a generalization of a theorem of Erdős and a theorem of Krückeberg on B_k sequences. 82j:10091
 Klotz, Walter Gitterpunktmenge mit gewissen verbotenen Teilmengen. 82i:10075
 Levine, Eugene An extremal result for sum-free sequences. 82d:10078
 Peck, G. W. Erdős conjecture on sums of distinct numbers. 82c:10096
 Sember, J. J. See Freedman, A. R., 82m:10081
 Subbarao, M. V. See Erdős, Paul; et al. 82j:10089
 Szemerédi, Endre See Erdős, Paul, 82c:10066
 Tenenbaum, Gérald Sur la densité divisorielle d'une suite d'entiers. [On the divisorial density of a sequence of integers] (See 82m:10066)

secondary classifications:

- Chen, Wen De See Dai, Zong Duo; et al. (82j:94014)
 Dai, Zong Duo (with Ni, Lu Qun; Yang, Jun Hui; Chen, Wen De) The estimation of the correlations of a class of binary sequences. (Chinese. English summary) (82j:94014)
 Dupain, Yves (with Grekos, Georges) Densités des sous-suites équiréparties d'une suite donnée. (82j:10084)
 Erdős, Paul (with Faber, Vance; Larson, Jean A.) Sets of natural numbers of positive density and cylindric set algebras of dimension 2. (82h:03069)
 Faber, Vance See Erdős, Paul; et al. (82h:03069)
 Furstenberg, H. ★Recurrence in ergodic theory and combinatorial number theory. (82j:28010)
 Grekos, Georges See Dupain, Yves. (82j:10084)
 (Gupta, Hansraj) See Narkiewicz, W., (82m:10015)
 Hall, R. R. On a conjecture of Erdős and Sárközy. (82h:10059)
 Larson, Jean A. See Erdős, Paul; et al. (82h:03069)
 Maucclair, Jean-Loup Suites limite-périodiques et théorie des nombres. I. (82d:10075a)
 Suites limite-périodiques et théorie des nombres. II. (82d:10075b)
 Suites limite-périodiques et théorie des nombres. III. (82d:10075c)
 Narkiewicz, W. A note on a paper of H. Gupta concerning powers of two and three: "Powers of 2 and sums of distinct powers of 3" [Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. No. 602-633 (1978), 151-158 (1979); MR 81g:10016]. (Serbo-Croatian summary) (82m:10015)
 Ni, Lu Qun See Dai, Zong Duo; et al. (82j:94014)
 Yang, Jun Hui See Dai, Zong Duo; et al. (82j:94014)

10L15 Representation functions

- Deshouillers, Jean-Marc (with Dress, F.) Théorie additive et points entiers sur les courbes. 82i:10076
 Dress, F. See Deshouillers, Jean-Marc. 82i:10076

Erdős, Paul Some extremal problems on divisibility properties of sequences of integers. **82i:10077**

Mustafin, Dž. S. On the solution of a conjecture of P. Erdős. (Russian) **82j:10092**

secondary classifications:

Chung, F. R. K. (with Graham, Ronald L.) On irregularities of distribution of real sequences. **(82g:10076)**

Graham, Ronald L. See **Chung, F. R. K.**, **(82g:10076)**

10L20 Arithmetic progressions [See also 10H20.]

Bate, John Aubrey (with Skillicorn, D. B.) Sequences, arithmetic-progression free sets and van der Waerden numbers. **82k:10076**

Brown, Thomas Craig On van der Waerden's theorem and the theorem of Paris and Harrington. **82i:10078**

Nathanson, Melvyn B. Arithmetic progressions contained in sequences with bounded gaps. **82c:10067**

Skillicorn, D. B. See **Bate, John Aubrey**, **82k:10076**

secondary classifications:

Beck, József A remark concerning arithmetic progressions. **(82h:05095)**

Erdős, Paul (with Tenenbaum, Gérard) Sur la structure de la suite des diviseurs d'un entier. (English summary) **(82h:10061)**

Furstenberg, H. (with Katznelson, Yitzhak) An ergodic Szemerédi theorem for commuting transformations. **(82c:28032)**

Katznelson, Yitzhak See **Furstenberg, H.**, **(82c:28032)**

Rødseth, Øystein J. On a linear Diophantine problem of Frobenius. II. **(82k:10018)**

Tenenbaum, Gérard See **Erdős, Paul**, **(82h:10061)**

10L99 None of the above, but in this section

Erdős, Paul (with Sárközy, A.; Szemerédi, Endre) On some extremal properties of sequences of integers. II. **82h:10077**

Sárközy, A. See **Erdős, Paul**; et al., **82h:10077**

Szemerédi, Endre See **Erdős, Paul**; et al., **82h:10077**

secondary classifications:

Berstel, Jean Sur la construction de mots sans carré. **(82a:68156)**

Buttsworth, R. N. On the probability that given polynomials have a specified highest common factor. **(82e:10091)**

10Mxx Rational arithmetic of algebraic objects

10M05 Polynomials [See also 13F20.]

Bremner, Andrew On reducibility of trinomials. **82i:10079**

Desimirova, L. K. Remarks on a paper by D. Pirgov and L. Stoilčev on the irreducibility of integer polynomials: "Über eine Klasse der irreduziblen ganzzahligen Polynome" [Bul. Inst. Politehn. București 32 (1970), no. 3, 25–30; MR 43 #1950]. (Russian. Romanian summary) **82h:10069**

Dorwart, Harold L. Old-fashioned algebra can be useful. **82d:10079**

Kantardžieva, Elena See **Pirgov, Dimit'r**, **82c:10068**

Pirgov, Dimit'r (with Kantardžieva, Elena) Über eine Verallgemeinerung des Kriteriums von G. Pólya über die Irreduzibilität ganzzahliger Polynome im Körper der rationalen Zahlen. **82c:10068**

See also **Desimirova, L. K.**, **82h:10069**

(Stoilčev, L.) See **Desimirova, L. K.**, **82h:10069**

secondary classifications:

Deshouillers, Jean-Marc (with Diab, Ahmad) Sur la distribution modulo M des suites polynomiales $[P(n)]$. II. **(82g:10063)**

Diab, Ahmad See **Deshouillers, Jean-Marc**, **(82g:10063)**

Dobrowolski, E. On a question of Lehmer. **(82k:12003)**

Schinzel, Andrzej On the relation between two conjectures on polynomials. **(82g:12004)**

10M10 Valued fields [See also 12J10.]

Marchisa, Giuseppe A sufficient condition for the continuity of the zeros of polynomials with coefficients in a topological field. (Italian. English summary) **82h:10070**

secondary classifications:

Basarab, Șerban A. Some model theory for Henselian valued fields. **(82m:03046)**

10M15 Ordered fields [See also 12J15.]

secondary classifications:

Becker, Eberhard Local global theorems for diagonal forms of higher degree. **(82c:10024)**

Mahdavi-Hezavehi, M. Totally ordered rings and fields. **(82e:06017)**

10M20 Matrices [See also 15A36.]

Estes, Dennis R. (with Taussky, Olga) Remarks concerning sums of three squares and quaternion commutator identities. **82a:10068**

Istamov, A. M. The asymptotic behavior of second-order integer matrices lying in a given hyperbolic domain and belonging to a given residue class. (Russian) **82a:10069**

Lal, Sunder (with Nanda, V. C.) On coprime symmetric matrix pairs over algebraic number fields. **82i:10088**

Nanda, V. C. See **Lal, Sunder**, **82i:10088**

Taussky, Olga Some facts concerning integral representations of the ideals in an algebraic number field. **82h:10078**

See also **Estes, Dennis R.**, **82a:10068**

secondary classifications:

Roginskii, L. I. On a problem of N. G. Čebotarëv. (Russian) **(82h:12004)**

10M99 None of the above, but in this section

secondary classifications:

Pippenger, Nicholas On the evaluation of powers and monomials. **(82c:10064)**

10Nxx Connections with logic

10N05 Decidability [See also 03B25.]

secondary classifications:

van den Dries, Lou Some model theory and number theory for models of weak systems of arithmetic. **(82f:03029)**

Which curves over \mathbb{Z} have points with coordinates in a discrete ordered ring? **(82i:03046)**

Lipshitz, Leonard Some remarks on the Diophantine problem for addition and divisibility. **(82c:03011)**

Manders, Kenneth L. Computational complexity of decision problems. **(82m:03053)**

10N10 Ultraproducts [See also 03C20.]

10N15 Nonstandard arithmetic [See also 03H15.]

secondary classifications:

Frey, Gerhard Cyclic isogenies and nonstandard arithmetic. **(82e:14048)**

Macintyre, Angus A theorem of Rabin in a general setting. **(82c:03106)**

Todorov, T. D. Asymptotic numbers. I. Algebraic properties. (Russian summary) **(82e:12036)**

10N99 None of the above, but in this section

secondary classifications:

Hodges, Wilfrid Interpreting number theory in nilpotent groups. **(82c:03047)**

Yager, Ronald R. On the lack of inverses in fuzzy arithmetic. **(82h:03063)**

12-XX ALGEBRAIC NUMBER THEORY, FIELD THEORY AND POLYNOMIALS

12-01 Elementary exposition, textbooks

Cohn, Harvey ★Advanced number theory. **82h:12001**

Hadlock, Charles Robert ★Field theory and its classical problems. **82c:12001**

secondary classifications:

Connell, Ian ★Modern algebra. **(82m:00001)**

Dobbs, David E. (with Hanks, Robert) ★A modern course on the theory of equations. **(82e:00003)**

Hanks, Robert See **Dobbs, David E.**, **(82e:00003)**

Lüneburg, Heinz ★Galoisfelder, Kreisteilungskörper und Schieberegisterfolgen. (German) [Galois fields, cyclotomic fields and shift-register sequences] **(82h:12018)**

12-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

Garbanati, Dennis Class field theory summarized. **(82g:12010)**

12-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Aubert, Karl Egil One hundred years ago. (Norwegian. English summary) **(82j:01044)**

Basimakov, I. G. Dedekind's method of introducing new concepts. (Russian. English summary) **(82i:01026)**

Caculiere, Roger Histoire de la loi de réciprocité quadratique: Gauss et Tate. **(82k:01022)**

Edwards, Harold M. The genesis of ideal theory. **(82i:01028)**

(Gauß, Carl Friedrich) See **Neumann, Olaf**, **(82i:01031)** and **Neumann, Olaf**, **(82i:01032b)**

Kočeva, A. A. Historical information on the origin of the mathematical concept of an ideal. (Russian) **(82e:01063)**

Mascheroni, L. ★Géométrie du compas. (French) [Geometry with the compass] **(82m:01081)**

Neumann, Olaf Über einige Tagebuchnotizen von C. F. Gauss (zur Entstehung der Kreisteilungstheorie). **(82i:01031)**

Zur Genesis der algebraischen Zahlentheorie. II. (82i:01032a)

Zur Genesis der algebraischen Zahlentheorie. III. (English summary) (82i:01032b)

Two proofs of the Kronecker-Weber theorem "according to Kronecker, and Weber". (82h:12008)

Pieper, H. Das historische Argument für die Beschäftigung mit komplexen Zahlen. [The historical argument for the study of complex numbers] (82j:01027)

(Pieru, C.) See Mascheroni, L., (82m:01081)

(Pieru, J.) See Mascheroni, L., (82m:01081)

Ramanathan, K. G. C. P. Ramanujan. (82i:01058)

(Ramanujan, Chidambaram Padmanabhan) See Ramanathan, K. G., (82i:01058)

12-04 Explicit machine computation and programs (not the theory of computation or programming)

Arnon, Dennis See Gunji, Hiroshi, 82c:12002

Brown, W. S. The subresultant PRS algorithm. 82g:12001

Gunji, Hiroshi (with Arnon, Dennis) On polynomial factorization over finite fields. 82c:12002

Khatwani, Krishna J. On Routh-Hurwitz criterion. 82d:12001

Lazard, Daniel Résolution des systèmes d'équations algébriques. (English summary) 82i:12001

Pippenger, Nicholas Computational complexity of algebraic functions. 82m:12001

Schnorr, C. P. How many polynomials can be approximated faster than they can be evaluated? 82g:12002

Wavrik, John Computers and the multiplicity of polynomial roots. 82m:12002

Winograd, Shmuel On multiplication of polynomials modulo a polynomial. 82j:12001

secondary classifications:

Akritis, Alkiviadis G. (with Danielopoulos, S. D.) On the complexity of algorithms for the translation of polynomials. (German summary) (82m:68080)

Alder, A. (with Strassen, V.) On the algorithmic complexity of associative algebras. (82g:68038)

Bini, Dario (with Capovani, Milvio) Lower bounds of the complexity of linear algebras. (82h:68062)

Border rank of a $p \times q \times 2$ tensor and the optimal approximation of a pair of bilinear forms. (82c:68037)

Bitimbaev, T. S. The number $d(h)$ of imaginary quadratic fields of a prime discriminant $d = -p$, $p \leq 1,000,763$ with a specified number $h(-p)$ of classes of ideals, where $h(-p)$ takes all odd one-digit, two-digit and four-digit values within the limits of the table. (Russian) (82a:12002)

Boyd, David W. Reciprocal polynomials having small measure. (82a:30005)

Cantor, David G. (with Zassenhaus, Hans) A new algorithm for factoring polynomials over finite fields. (82e:12020)

Capovani, Milvio See Bini, Dario, (82h:68062)

Danielopoulos, S. D. See Akritis, Alkiviadis G., (82m:68080)

Davenport, J. H. Algorithms for the integration of algebraic functions. (82j:12025)

Ja' Ja', Joseph Computation of bilinear forms over finite fields. (82a:68074)

Pippenger, Nicholas Algebraic complexity theory. (82a:68020)

Schwartz, Jacob T. Fast probabilistic algorithms for verification of polynomial identities. (82m:68078)

Strassen, V. See Alder, A., (82g:68038)

Trinks, Wolfgang Über B. Buchbergers Verfahren, Systeme algebraischer Gleichungen zu lösen. (English summary) (82i:13007)

Viry, Guy Factorisation des polynômes à plusieurs variables. (English summary) (82c:12016)

Zassenhaus, Hans See Cantor, David G., (82e:12020)

12-06 Proceedings, conferences, etc.

p -adic L -functions and algebraic number theory ★ p -adic L -functions and algebraic number theory. (Japanese) 82h:12001

Symposium:

p -adic L -Functions and Algebraic Number Theory ★ p -adic L -functions and algebraic number theory. (Japanese) 82h:12001

secondary classifications:

(Friedlander, Eric M.) See Algebraic K -theory, (82e:18001)

(Stein, Michael R.) See Algebraic K -theory, (82e:18001)

Algebraic K -theory ★ Algebraic K -theory, Evanston 1980. (82e:18001)

Conference:

Algebraic K -Theory ★ Algebraic K -theory, Evanston 1980. (82e:18001)

Evanston, Ill. ★ Algebraic K -theory, Evanston 1980. (82e:18001)

Number theory ★ Number theory. (Japanese) (82a:10002)

Seminar:

Number Theory ★ Séminaire de Théorie de Nombres, 1980-1981. (French) [Seminar on Number Theory, 1980-1981] (82m:10006)

Symposium:

Number Theory ★ Number theory. (Japanese) (82a:10002)

Talence ★ Séminaire de Théorie de Nombres, 1980-1981. (French) [Seminar on Number Theory, 1980-1981] (82m:10006)

12Axx Algebraic number theory: global fields {For complex multiplication, see 10D25.}

12A05 Analogues in number fields of elementary number theory

Kanehwa, Ryuji (with Shiohara, Iekata) On the sum of digits of primes in imaginary quadratic fields. 82h:12002

Lenstra, H. W., Jr. Artin's conjecture on primes with prescribed primitive roots. 82g:12003

Shiohara, Iekata See Kanehwa, Ryuji, 82h:12002

Singh, Sahib The universal side divisors in some integral domains. 82h:12002

secondary classifications:

Jäger, Joachim Zur Existenz und Berechnung von ggT und kgV in Integritätsringen und deren Quotientenkörpern. (82e:13017)

Pinsky, Mark A. The eigenvalues of an equilateral triangle. (82d:35077)

12A10 Characterizations of algebraic numbers and algebraic functions

12A15 Special algebraic numbers (PV numbers, etc.)

Pathiaux, Martine Familles fermées de n -uplets de nombres algébriques. 82e:12001

Schmidt, Klaus D. On periodic expansions of Pisot numbers and Salem numbers. 82c:12003

Smyth, C. J. On the measure of totally real algebraic integers. 82j:12002a

On the measure of totally real algebraic integers. II. 82j:12002b

Talmoudi, Faouzia Lazami Sur les éléments de $S \cap \{1, 2\}$. 82a:12001

secondary classifications:

Kahane, Jean-Pierre Polynômes à coefficients unimodulaires sur le cercle unité. (82c:30027)

Laurent, Michel Exemples d'ensembles de multiplicité. (English summary) (82c:43007)

Marion, Jacques Dimension de Hausdorff et fractions continues. (English summary) (82h:10073)

Smyth, C. J. On measures of polynomials in several variables. (82h:10074)

12A20 Polynomials (irreducibility, etc.)

Dobrowolski, E. On a question of Lehmer. 82h:12003

Fried, M. Exposition on an arithmetic-group theoretic connection via Riemann's existence theorem. 82j:12003

Györy, Kálmán On certain graphs composed of algebraic integers of a number field and their applications. I. 82f:12001

Roginskii, L. I. On a problem of N. G. Čebotarëv. (Russian) 82h:12004

Schinzel, Andrzej On the relation between two conjectures on polynomials. 82g:12004

secondary classifications:

Boyd, David W. Kronecker's theorem and Lehmer's problem for polynomials in several variables. (82e:10066)

Gramain, François Sur le théorème de Fukasawa-Gelfond. [On the Fukasawa-Gelfond theorem] (See 82m:10006)

Greiter, Gebhard Explizite Formeln für Einheiten algebraischer Zahlkörper und eine Familie irreduzibler Polynome über Funktionenkörpern. (82d:12004)

Lenstra, H. W., Jr. Artin's conjecture on primes with prescribed primitive roots. (82g:12003)

Sato, Ken-iti A remark concerning the prime decomposition in $\mathbb{Q}(\zeta, \sqrt{m})$. (82f:12002)

Winograd, Shmuel On multiplication of polynomials modulo a polynomial. (82j:12001)

12A25 Quadratic fields

Bitimbaev, T. S. The number $d(h)$ of imaginary quadratic fields of a prime discriminant $d = -p$, $p \leq 1,000,763$ with a specified number $h(-p)$ of classes of ideals, where $h(-p)$ takes all odd one-digit, two-digit and four-digit values within the limits of the table. (Russian) 82a:12002

Bölling, Reinhard Über einen Homomorphismus der rationalen Punkte elliptischer Kurven. 82d:12002

Kimura, Noriaki On the class number of real quadratic fields $\mathbb{Q}(\sqrt{p})$ with $p \equiv 1 \pmod{4}$. 82i:12002

Lagarias, J. C. On determining the 4-rank of the ideal class group of a quadratic field. 82c:12004

Mestre, Jean-François Courbes elliptiques et groupes de classes d'idéaux de certains corps quadratiques. 82j:12004

Slavutskii, I. S. On the class number of the divisors of a real quadratic field. II. (Russian) 82h:12003

secondary classifications:

Çallıalp, Fethi Non-nullité des fonctions zêta des corps quadratiques réels pour $0 < s < 1$. (English summary) (82h:12014)

Chowla, P. (with Chowla, Sarvadaman) On Bernoulli numbers. II. (82m:10022)

Chowla, Sarvadaman See Chowla, P., (82m:10022)

Hurrelbrink, Jürgen On $K_2(o)$ and presentations of $SL_n(o)$ in the real quadratic case. (82h:12008)

Kawasaki, Toshikazu On the class number of real quadratic fields. (82g:12006)

Lagarias, J. C. Signatures of units and congruences (mod 4) in certain real quadratic fields. II. (82f:12008)

Levesque, Claude Systèmes fondamentaux d'unités de certains composés de deux corps quadratiques. I. [Fundamental systems of units of certain composita of two quadratic fields. I] (82m:12003)

Lu, Hong Wen On the class number of real quadratic fields. (82d:12005)

Makys, M. The "large sieve" in quadratic fields. (Russian. Lithuanian and English summaries) (82h:10063)

Rosen, Kenneth H. L -series for genera at $s=1$. (82a:10044)

Schmithals, Bodo Konstruktion imaginärquadratischer Körper mit unendlichem Klassenkörperturm. (82f:12017)

- Takhtadjan, L. A. Asymptotic formula for the sum of the lengths of the periods of the quadratic irrationalities of discriminant D . (Russian. English summary) (82a:10047)
 Williams, Kenneth S. The class number of $\mathbb{Q}(\sqrt{p})$ modulo 4, for $p \equiv 5 \pmod{8}$ a prime. (82e:12006)

12A30 Cubic and quartic fields

- Chowla, Sarvadaman (with Cowles, John R.; Cowles, M.) Some problems from the study of cubic fields. 82k:12001
 Cowles, John R. See Chowla, Sarvadaman; et al., 82k:12001
 Cowles, M. See Chowla, Sarvadaman; et al., 82k:12001
 Gillard, Roland Unités elliptiques et fonctions L - p -adiques. 82j:12005
 Girstmair, Kurt On root polynomials of cyclic cubic equations. 82h:12005
 Scharlau, Rudolf The fundamental unit in quadratic extensions of imaginary quadratic fields. 82c:12005
 Williams, H. C. Improving the speed of calculating the regulator of certain pure cubic fields. 82a:12003

secondary classifications:

- Frei, Günther Fundamental systems of units in number fields $\mathbb{Q}(\sqrt{D^2+d}, \sqrt{D^2+4d})$ with $d|D$. (82i:12005)
 Iimura, Kiyooki On the unit groups of certain sextic number fields. (82f:12007)
 Nakamura, Ken Class number calculation and elliptic unit. I. Cubic case. (82k:12007a)
 Class number calculation and elliptic unit. II. Quartic case. (82k:12007b)
 Williams, H. C. Errata: "Certain pure cubic fields with class-number one" [Math. Comp. 31 (1977), no. 138, 578–580; MR 55 #5578]. (82j:12012)

12A35 Abelian and metabelian extensions (including cyclotomic, Kummer, cyclic)

- Bertrand, Daniel Kummer theory on the product of an elliptic curve by the multiplicative group. 82i:12003
 Bloom, John R. (with Gerth, Frank, III) The Iwasawa invariant μ in the composite of two \mathbb{Z}_p -extensions. 82j:12006
 Brumer, Armand The class group of all cyclotomic integers. 82e:12002
 Cuoco, Albert A. The growth of Iwasawa invariants in a family. 82h:12004
 Gerth, Frank, III See Bloom, John R., 82j:12006
 Gurak, S. The Hasse norm principle in a compositum of radical extensions. 82h:12005
 Ishida, Makoto On the genus fields of pure number fields. 82j:12007a
 On the genus fields of pure number fields. II. 82j:12007b
 Kersey, Donald Modular units inside cyclotomic units. 82h:12006
 Kida, Yūji L -extensions of CM-fields and cyclotomic invariants. 82c:12006
 Kühnrová, Jitka Maillet's determinant D_{p^n} . 82c:12003
 Liang, Joseph J. (with Toro, Emilio) On the periods of the cyclotomic field. 82a:12003
 Monsky, Paul Some invariants of \mathbb{Z}_p -extensions. 82h:12007
 Neumann, Olaf Two proofs of the Kronecker-Weber theorem "according to Kronecker, and Weber". 82h:12008
 Perrin-Riou, Bernadette Plongement d'une extension diédrale dans une extension diédrale ou quaternionienne. 82k:12002
 Sato, Ken-iti A remark concerning the prime decomposition in $\mathbb{Q}(\zeta, \sqrt[n]{n})$. 82f:12002
 Shirai, Susumu On Galois groups of class two extensions over the rational number field. 82f:12003
 On the central ideal class group of cyclotomic fields. 82f:12004
 Sinnott, W. On the Stickelberger ideal and the circular units of an abelian field. 82j:12004
 Sorenson, Peter Sums of two integral squares in certain cyclotomic number fields. II. (See 82m:10006)
 Soule, Christophe K -théorie et corps cyclotomiques. [K -theory and cyclotomic fields] (See 82m:10006)
 Sze, Alexander A normal integral basis theorem. 82h:12009
 Toro, Emilio See Liang, Joseph J., 82a:12003
 Wiles, Andrew Modular curves and the class group of $\mathbb{Q}(\zeta_p)$. 82j:12009

secondary classifications:

- Bernardi, Dominique Résidus de puissances et formes quadratiques. (82e:10006)
 Burde, Klaus Ein Reziprozitätsgesetz in Galoisfeldern. (82e:12022)
 Childs, Lindsay N. Stickelberger relations and tame extensions of prime degree. (82j:12009)
 Cuoco, Albert A. (with Monsky, Paul) Class numbers in \mathbb{Z}_p -extensions. (82h:12010)
 Ishikawa, Hirofumi The traces of Hecke operators in the space of the "Hilbert modular" type cusp forms of weight two. (82k:10028)
 Karamatsu, Yoshikazu On Fermat's last theorem and the first factor of the class number of the cyclotomic field. II. (82a:10020)
 Miki, Sirpa ★The determination of units in real cyclic sextic fields. (82a:12004)
 Monsky, Paul On p -adic power series. (82h:12018)
 See also Cuoco, Albert A., (82h:12010)
 Nakamura, Ken Class number calculation and elliptic unit. III. Sextic case. (82k:12007c)
 Newman, Morris Determinants of circulants of prime power order. (82c:15020)
 Quebbemann, Heinz-Georg Zur Klassifikation unimodularer Gitter mit Isometrie von Primzahlordnung. (82m:10039)
 Sinnott, W. On the Stickelberger ideal and the circular units of an abelian field. (See 82j:12004)
 Takeuchi, Hiroshi On the class number of the maximal real subfield of a cyclotomic field. (82j:12011)
 Ullom, Stephen V. Galois module structure for intermediate extensions. (82a:12007)
 Watabe, Mutsuo Correction to the paper: "On class numbers of some cyclotomic fields" [J. Reine Angew. Math. 301 (1978), 212–215; MR 80h:12005]. (82m:12005)
 p -adic L -functions and algebraic number theory ★ p -adic L -functions and algebraic

number theory. (Japanese) (82h:12001)

Symposium:

p -adic L -Functions and Algebraic Number Theory ★ p -adic L -functions and algebraic number theory. (Japanese) (82h:12001)

12A40 Other number fields

secondary classifications:

- Frei, Günther (with Levesque, Claude) On an independent system of units in the field $K = \mathbb{Q}(\sqrt{D^2 \pm d})$ where $d|D^n$. (82f:12005)
 Iimura, Kiyooki On the L -class group of an algebraic number field. (82k:12006)
 Levesque, Claude See Frei, Günther, (82f:12005)
 Mohanty, S. P. A class of Diophantine equations. (82i:10019)

12A45 Units and factorization

- Avanesov, È. T. (with Billevit, K. K.) The fundamental units of cubic fields of positive discriminant. (Russian) 82k:12003
 Billevit, K. K. See Avanesov, È. T., 82k:12003
 Brunotte, Horst Zur Beziehung zwischen Basen und Vektoren kürzester Länge in Gittern. (English summary) 82g:12005
 Duval, Dominique Sur la structure galoisienne du groupe des unités d'un corps abélien réel de type (p, p) . (English summary) 82k:12004
 Feng, Ke Qin See Pei, Ding Yi, 82j:12010
 Frei, Günther (with Levesque, Claude) On an independent system of units in the field $K = \mathbb{Q}(\sqrt{D^2 \pm d})$ where $d|D^n$. 82f:12005
 Fundamental systems of units in number fields $\mathbb{Q}(\sqrt{D^2+d}, \sqrt{D^2+4d})$ with $d|D$. 82i:12005
 Gras, Marie-Nicole Note à propos d'une conjecture de H. J. Godwin sur les unités des corps cubiques. 82f:12006
 Greiter, Gebhard Explizite Formeln für Einheiten algebraischer Zahlkörper und eine Familie irreduzibler Polynome über Funktionenkörpern. 82d:12004
 Iimura, Kiyooki On the unit groups of certain sextic number fields. 82f:12007
 Kasube, Herbert E. Unique and almost unique factorization. (See 81a:10004)
 Klingens, Norbert Über schwache quadratische Zerlegungssätze. 82i:12006
 Lagarias, J. C. Signatures of units and congruences (mod 4) in certain totally real fields. 82c:12004
 Signatures of units and congruences (mod 4) in certain real quadratic fields. II. 82f:12008
 Levesque, Claude Systèmes fondamentaux d'unités de certains composés de deux corps quadratiques. I. [Fundamental systems of units of certain composita of two quadratic fields. I] 82m:12003
 See also Frei, Günther, 82f:12005
 Miki, Sirpa ★The determination of units in real cyclic sextic fields. 82a:12004
 Payan, Jean-Jacques Remarques sur la structure galoisienne des unités des corps de nombres. [Remarks on the Galois structure of the units of number fields] 82k:12005
 Pei, Ding Yi (with Feng, Ke Qin) A note on the independence of units of cyclotomic fields. (Chinese) 82j:12010
 Sinnott, W. On the Stickelberger ideal and the circular units of an abelian field. (See 82j:10004)
 Williams, H. C. Some results concerning Voronoi's continued fraction over $\mathbb{Q}(\sqrt{D})$. 82j:12011

secondary classifications:

- Chowla, Sarvadaman (with Cowles, John R.; Cowles, M.) Some problems from the study of cubic fields. (82k:12001)
 Cohn, Harvey The explicit Hilbert 2-cyclic class field for $\mathbb{Q}(\sqrt{-p})$. (82e:12011)
 Cowles, John R. See Chowla, Sarvadaman; et al., (82k:12001)
 Cowles, M. See Chowla, Sarvadaman; et al., (82k:12001)
 Dubois, Eugène Best approximations of zero by a cubic linear form. Calculation of the fundamental unit of a not totally real cubic field. (See 82j:10003)
 Hendy, M. D. (with Jeans, N. S.) The Jacobi-Perron algorithm in integer form. (82j:10011)
 Jeans, N. S. See Hendy, M. D., (82j:10011)
 Kaplan, Pierre (with Williams, Kenneth S.) An Artin character and representations of primes by binary quadratic forms. (82d:10036)
 Kersey, Donald Modular units inside cyclotomic units. (82h:12006)
 Kobayashi, Shinju Divisibilité du nombre de classes des corps abéliens réels. (82f:12009)
 Nakamura, Ken Class number calculation and elliptic unit. I. Cubic case. (82k:12007a)
 Class number calculation and elliptic unit. II. Quartic case. (82k:12007b)
 Class number calculation and elliptic unit. III. Sextic case. (82k:12007c)
 Narkiewicz, W. Normal order for a function associated with factorization into irreducibles. (82h:10060)
 Ochoa, J. An elementary model for the classes of ideals of an algebraic torus. (Spanish) (82f:15012a)
 An elementary model for the classes of ideals of an algebraic torus. II. (Spanish) (82f:15012b)
 Pak, G. K. Filtration of the group of principal units of a local function field as a Galois module. (Russian) (82g:12015)
 Rosen, Kenneth H. L -series for genera at $s=1$. (82a:10044)
 Scharlau, Rudolf The fundamental unit in quadratic extensions of imaginary quadratic fields. (82c:12005)
 Seeder, Susan C. Combinatorial identities derived from units. (82m:05016)
 Sinnott, W. On the Stickelberger ideal and the circular units of an abelian field. (82j:12004)
 Stollenberg-Hansen, Viggo (with Tucker, J. V.) Computing roots of unity in fields. (82d:03074)

- Stroeker, R. J. On the Diophantine equation $(2y^2-3)^2 = x^2(3x^2-2)$ in connection with the existence of nontrivial tight 4-designs. (82j:10032)
- Taussky, Olga Composition of binary integral quadratic forms via integral 2×2 matrices and composition of matrix classes. (82m:15030)
- Tucker, J. V. See Stollenberg-Hansen, Viggo, (82d:30704)
- Williams, Kenneth S. See Kaplan, Pierre, (82d:10036)

12A50 Class number, discriminant

- Cornell, Gary Abhyankar's lemma and the class group. 82c:12007
(with Rosen, Michael) Group-theoretic constraints on the structure of the class group. 82e:12005
- Cuoco, Albert A. (with Monsky, Paul) Class numbers in \mathbb{Z}_p^d -extensions. 82h:12010
- Czogala, Alfred Arithmetic characterization of algebraic number fields with small class numbers. 82e:12006
- Diaz y Diaz, Francisco ★Tables minorant la racine n -ième du discriminant d'un corps de degré n . (French) [Tables of lower bounds for the n th root of the discriminant of a field of degree n] 82i:12007
- Iimura, Kiyooki On the f -class group of an algebraic number field. 82k:12006
- Kaplan, Pierre Nouvelle démonstration d'une congruence modulo 16 entre les nombres de classes d'idéaux de $\mathbb{Q}(\sqrt{-2p})$ et $\mathbb{Q}(\sqrt{2p})$ pour p premier $\equiv 1 \pmod{4}$. [New proof of a congruence modulo 16 between the numbers of ideal classes of $\mathbb{Q}(\sqrt{-2p})$ and $\mathbb{Q}(\sqrt{2p})$ for p a prime $\equiv 1 \pmod{4}$] 82m:12004
- Kawasaki, Toshikazu On the class number of real quadratic fields. 82g:12006
- Kobayashi, Shinju Divisibilité du nombre de classes des corps abéliens réels. 82f:12009
- Lu, Hong Wen On the class number of real quadratic fields. 82d:12005
- Maurer, Donald Arithmetic properties of the idèle discriminant. 82e:12007
- Monsky, Paul See Cuoco, Albert A., 82h:12010
- Nakamura, Ken Class number calculation and elliptic unit. I. Cubic case. 82k:12007a
Class number calculation and elliptic unit. II. Quartic case. 82k:12007b
Class number calculation and elliptic unit. III. Sextic case. 82k:12007c
- Rosen, Michael See Cornell, Gary, 82e:12005
- Schmithals, Bodo Eine Verallgemeinerung der Klassenrangabschätzung für Zahlkörper von Roquette und Zassenhaus. 82f:12010
- Tahtadjan, L. A. See Vinogradov, A. I., 82d:10038
- Takeuchi, Hiroshi On the class number of the maximal real subfield of a cyclotomic field. 82f:12011
- Vinogradov, A. I. (with Tahtadjan, L. A.) On the Gauss-Hasse hypothesis for real quadratic fields. (Russian) 82d:10038
- Walter, Colin D. Brauer's class number relation. 82d:12006
Kuroda's class number relation. 82d:12007
Pure fields of degree 9 with class number prime to 3. 82h:12006
- Watabe, Mutsuo Correction to the paper: "On class numbers of some cyclotomic fields" [J. Reine Angew. Math. 301 (1978), 212-215; MR 80h:12005]. 82m:12005
- Williams, H. C. Errata: "Certain pure cubic fields with class-number one" [Math. Comp. 31 (1977), no. 138, 578-580; MR 55 #5578]. 82j:12012
- Williams, Kenneth S. The class number of $\mathbb{Q}(\sqrt{p})$ modulo 4, for $p \equiv 5 \pmod{8}$ a prime. 82i:12008

secondary classifications:

- Bloom, John R. (with Gerth, Frank, III) The Iwasawa invariant μ in the composite of two \mathbb{Z}_p -extensions. (82j:12006)
- Brumer, Armand The class group of all cyclotomic integers. (82e:12002)
- Çallıalp, Fethi Non-nullité des fonctions zeta des corps quadratiques réels pour $0 < s < 1$. (English summary) (82h:12014)
- Chowla, P. (with Chowla, Sarvadaman) A note on Bernoulli numbers. (82c:10013)
- Chowla, Sarvadaman See Chowla, P., (82c:10013)
- Gerth, Frank, III See Bloom, John R., (82j:12006)
- Karamatsu, Yoshikazu On Fermat's last theorem and the first factor of the class number of the cyclotomic field. II. (82a:10020)
- Kimura, Noriaki On the class number of real quadratic fields $\mathbb{Q}(\sqrt{p})$ with $p \equiv 1 \pmod{4}$. (82i:12002)
- Lagarias, J. C. On determining the 4-rank of the ideal class group of a quadratic field. (82c:12004)
- Maki, Sirpa ★The determination of units in real cyclic sextic fields. (82a:12004)
- Meyer, Werner (with Szezech, R.) Über eine topologische und zahlentheoretische Anwendung von Hirzebruchs Spitzenauflösung. (82c:10035)
- Monsky, Paul Some invariants of \mathbb{Z}_p^d -extensions. (82h:12007)
- Szezech, R. See Meyer, Werner, (82c:10035)
- Shirai, Susumu On the central ideal class group of cyclotomic fields. (82f:12004)
- Slavutskii, I. Š. On the class number of the divisors of a real quadratic field. II. (Russian) (82h:12003)
- Weintraub, Steven H. $\mathrm{PSL}_2(\mathbb{Z}_p)$ and the Atiyah-Bott fixed-point theorem. (82c:10029)
- Yu, Jing A cuspidal class number formula for the modular curves $X_1(N)$. (82h:10030)

12A55 Galois theory

- Bastida, Julio R. The determination of certain fields of invariants. 82f:12012
- Childs, Lindsay N. Stickelberger relations and tame extensions of prime degree. 82i:12009
- Dussaud, René See Gallissot, François, 82a:12005
- Fried, M. A note on automorphism groups of algebraic number fields. 82c:12008
- Gallissot, François (with Dussaud, René) Étude des blocs de classes et des extensions normales des corps non galoisiens associés. 82a:12005
- Györy, Kálmán Corps de nombres algébriques d'anneau d'entiers monogène. 82a:12006
- Isharov, V. V. On a case of an imbedding problem with a solvable kernel. (Russian) 82m:12006
- Jensen, Christian U. (with Yui, Noriko) Polynomials with D_3 (resp. A_3) as Galois group. 82e:12009
- Miyake, Katsuya On the structure of the idèle group of an algebraic number field. 82f:12013

- On the general principal ideal theorem. 82k:12008
- Nakazato, Hajime On odd two-dimensional icosahedral Galois representations with square free conductor. 82j:12013
- Neukirch, J. Extensions of number fields with solvable Galois groups. (See 82j:10004)
- Queyruet, Jacques Structure galoisienne des anneaux d'entiers d'extensions sauvagement ramifiées. 82k:12009
Structure galoisienne des anneaux d'entiers d'extensions sauvagement ramifiées. I. [Galois structure of rings of integers with wildly branching extensions. I] (See 82j:10004)
- Taylor, Martin J. Structure galoisienne des anneaux d'entiers des extensions de Kummer. 82g:12007
Galois module structure of rings of integers. 82e:12008
Structure galoisienne des anneaux d'entiers. [Galois structure of rings of integers] (See 82j:10004)
On Fröhlich's conjecture for rings of integers of tame extensions. 82g:12008
Monomial representations and rings of integers. 82f:12010
- Wingberg, Kay Existenz unendlicher algebraischer Zahlkörper, über denen jedes Einbettungsproblem lösbar ist. 82f:12014
- Yui, Noriko See Jensen, Christian U., 82e:12009

secondary classifications:

- Ding, Xia Xi Imbedding theorems and the large sieve method in algebraic number fields. (Chinese. English summary) (82d:10066)
- Isharov, V. V. On the semidirect imbedding problem with a metabelian kernel. (Russian) (82f:12030)
- Maurer, Donald Arithmetic properties of the idèle discriminant. (82e:12007)
- Sonn, Jack Rational division algebras as solvable crossed products. (82e:12027)
- Spiegel, Eugene Schur indices and the Galois group. (82b:20010)
- Waldschmidt, Michel Transcendance et exponentielles en plusieurs variables. (82k:10042)

12A57 Integral representations related to algebraic numbers [See also 20C10.]

- Fröhlich, A. Galois module structure and rootnumbers for quaternion extensions of degree 2^n . 82k:12010
- Kovács, B. Canonical number systems in algebraic number fields. 82j:12014
- McCulloh, Leon R. A class number formula for elementary-abelian-group rings. 82e:12009
- Miyata, Takehiko On the units of the integral group ring of a dihedral group. 82h:12007
- Mollin, R. A. Correction to the paper: "Splitting fields and group characters" [J. Reine Angew. Math. 315 (1980), 107-114; MR 81b:12011]. 82i:12011
- Taylor, Martin J. A logarithmic approach to classgroups of integral group rings. 82h:12011
- Ullom, Stephen V. Galois module structure for intermediate extensions. 82a:12007

secondary classifications:

- Curtis, Charles W. (with Reiner, Irving) ★Methods of representation theory. Vol. I. (82i:20001)
- Duval, Dominique Sur la structure galoisienne du groupe des unités d'un corps abélien réel de type (p, p) . (English summary) (82k:12004)
- Opolka, Hans A note on projective representations over fields with many roots of unity. (82d:20017)
- Passman, D. S. (with Smith, P. F.) Units in integral group rings. (82h:20009)
- Reiner, Irving See Curtis, Charles W., (82i:20001)
- Smith, P. F. See Passman, D. S., (82h:20009)
- Sze, Alexander A normal integral basis theorem. (82h:12009)
- Taussky, Olga Some facts concerning integral representations of the ideals in an algebraic number field. (82b:10078)
- Taylor, Martin J. On Fröhlich's conjecture for rings of integers of tame extensions. (82g:12008)
Monomial representations and rings of integers. (82f:12010)

12A60 Galois cohomology [See also 12Gxx, 16A16.]

- Hattori, Akira On Amitsur cohomology of rings of algebraic integers. 82h:12012
Some arithmetical applications of groups $H^q(R, G)$. 82g:12009
- Opolka, Hans Auflösung zahlentheoretischer Knoten in Galoisweiterungen von \mathbb{Q} . 82e:12010

secondary classifications:

- Shirai, Susumu On Galois groups of class two extensions over the rational number field. (82f:12003)

12A62 Applications of algebraic K -theory

- Browkin, Jerzy The functor K_2 in algebraic number theory. (Polish. English summary) 82f:12015
- Grayson, Daniel R. Dilogarithm computations for K_3 . 82i:12012
- Hurrelbrink, Jürgen On $K_2(\mathfrak{o})$ and presentations of $\mathrm{SL}_2(\mathfrak{o})$ in the real quadratic case. 82h:12008
- Shapiro, Jack M. Relations between the Milnor and Quillen K -theory of fields. 82f:12016
- secondary classifications:
- Alperin, Roger C. $\mathrm{SL}_2(\mathbb{Z}[1+\sqrt{5}]/2)$. (82f:18014)
- Bloch, Spencer Applications of the dilogarithm function in algebraic K -theory and algebraic geometry. (82f:14009)
- Gräbe, Hans-Gert Über die Umkehrfrage der reduzierten K -Theorie. (82e:12015)

- Grayson, Daniel R. SK_1 of an interesting principal ideal domain. (82m:18005)
 Loday, Jean-Louis Symboles en K -théorie algébrique supérieure. (English summary) (82f:13005)
 Queyruy, Jacques Structure galoisienne des anneaux d'entiers d'extensions sauvagement ramifiées. (82k:12009)
 Soulé, Christophe K -théorie et corps cyclotomiques. [K -theory and cyclotomic fields] (See 82m:10006)
 Stienstra, Jan On K_2 and K_3 of truncated polynomial rings. (82k:13016)

12A65 Class field theory

- Bak, Anthony Le problème des sous-groupes de congruence et le problème métaplectique pour les groupes classiques de rang >1 . (English summary) 82b:12009
 Bond, Robert J. Some results on the capitulation problem. 82a:12011
 Chang, S. M. (with Foote, Richard) Capitulation in class field extensions of type (p, p) . 82i:12013
 Cohn, Harvey The explicit Hilbert 2-cyclic class field for $\mathbb{Q}(\sqrt{-p})$. 82c:12011
 Foote, Richard See Chang, S. M., 82i:12013
 Furuta, Yoshiomi A prime decomposition symbol for a nonabelian central extension which is abelian over a bicyclic biquadratic field. 82a:12008
 Garbanati, Dennis Class field theory summarized. 82g:12010
 Heider, Franz-Peter Strahlknoten und Geschlechterkörper mod m . 82c:12012
 Henriart, Guy Lois de réciprocité explicites. (English summary) [Explicit reciprocity laws] (See 82j:10004)
 Madden, Daniel J. (with Vêlez, William Yslas) A note on the normality of unramified, abelian extensions of quadratic extensions. 82c:12013
 Novikov, A. P. The Kronecker limit formula in a real quadratic field. (Russian) 82c:12010
 Schmithals, Bodo Konstruktion imaginärquadratischer Körper mit unendlichem Klassenkörperturm. 82f:12017
 Vêlez, William Yslas See Madden, Daniel J., 82c:12013

secondary classifications:

- Cohn, Harvey An explicit modular equation in two variables and Hilbert's twelfth problem. (82k:10027)
 Cornell, Gary Abhyankar's lemma and the class group. (82c:12007)
 Deligne, Pierre Cycles de Hodge absolus et périodes des intégrales des variétés abéliennes. (82k:14027)
 Gross, Benedict H. The annihilation of divisor classes in abelian extensions of the rational function field. (See 82m:10006)
 Ishida, Makoto On the genus fields of pure number fields. (82j:12007a)
 On the genus fields of pure number fields. II. (82j:12007b)
 Klingens, Norbert Über schwache quadratische Zerlegungssätze. (82i:12006)
 Miyake, Katsuya On the general principal ideal theorem. (82k:12008)
 Perrin-Riou, Bernadette Groupe de Selmer à 2 variables des courbes elliptiques à multiplication complexe. [Selmer group with 2 variables of elliptic curves with complex multiplication] (See 82j:10004)
 Rohrlich, David E. Galois conjugacy of unramified twists of Hecke characters. (82a:12009)
 Rück, Hans-Georg Diskriminanten zu singulären Werten von j . (82f:10027)
 Sato, Ken-iti A remark concerning the prime decomposition in $\mathbb{Q}(\zeta, \sqrt{m})$. (82f:12002)
 Schmithals, Bodo Eine Verallgemeinerung der Klassenrangschätzung für Zahlkörper von Roquette und Zassenhaus. (82f:12010)
 Yoshida, Hiroyuki Abelian varieties with complex multiplication and representations of the Weil groups. (82k:14044)

12A67 Langlands-Weil conjectures, nonabelian class field theory [See also 10Dxx, 22E55.]

- Ash, Avner (with Rudolph, Lee) The modular symbol and continued fractions in higher dimensions. 82g:12011
 Kazhdan, David An introduction to Drinfel'd's "Shtuka". 82f:12018
 Koch, Helmut (with Zink, Ernst-Wilhelm) ★ Zur Korrespondenz von Darstellungen der Galoisgruppen und der zentralen Divisionsalgebren über lokalen Körpern (der zahme Fall). (German) [On the correspondence of representations of Galois groups and the central division algebras over local fields (the tame case)] 82h:12013
 Rudolph, Lee See Ash, Avner, 82g:12011
 Tunnel, Jerrold Artin's conjecture for representations of octahedral type. 82j:12015
 Zink, Ernst-Wilhelm See Koch, Helmut, 82h:12013

secondary classifications:

- Gérardin, Paul Changement du corps de base pour les représentations de $GL(2)$ [d'après R. P. Langlands, H. Saito [Hiroshi Saito] et T. Shintani]. (82b:10036)
 Jacquet, Hervé (with Shalika, Joseph) On Euler products and the classification of automorphic representations. I. (82m:10050a)
 (with Shalika, Joseph) On Euler products and the classification of automorphic forms. II. (82m:10050b)
 Klingen, Norbert Über schwache quadratische Zerlegungssätze. (82i:12006)
 Langlands, Robert P. On the zeta functions of some simple Shimura varieties. (82k:10042)
 Stable conjugacy: definitions and lemmas. (82j:10054)
 ★ Base change for $GL(2)$. (82a:10032)
 See also Gérardin, Paul, (82b:10036)
 Li, Jing Hui A conjecture about elliptic curves. (Chinese) (82d:10039)
 Platietski-Shapiro, Ilya Iosifovich Tate theory for reductive groups and distinguished representations. (82f:10037)
 (Saito, Hiroshi) See Gérardin, Paul, (82b:10036)
 Shalika, Joseph See Jacquet, Hervé, (82m:10050)

- (Shintani, Takuro) See Gérardin, Paul, (82b:10036)
 Vignéras, Marie-France Valeur au centre de symétrie des fonctions L associées aux formes modulaires. [The value at the center of symmetry of the L functions associated to modular forms] (See 82j:10004)
 Waldspurger, J. L. Correspondance de Shimura. [Shimura correspondence] (See 82j:10004)

12A70 Zeta functions of number fields and generalizations [See also 10H08, 10H10.]

- Balasko, Yves Travaux de Coates et Wiles sur la conjecture de Birch et Swinnerton-Dyer. 82c:12014
 Barner, Klaus On A. Weil's explicit formula. 82i:12014
 Calliag, Fethi Non-nullité des fonctions zeta des corps quadratiques réels pour $0 < s < 1$. (English summary) 82h:12014
 Cassou-Noguès, Pierrette p -adic L -functions for elliptic curves with complex multiplication. I. 82f:12019
 Fröhlich, A. On parity problems. 82b:12010
 Gillard, Roland Unités elliptiques et fonctions L p -adiques. [Elliptic units and p -adic L functions] (See 82j:10004)
 Goldstein, Catherine (with Schappacher, Norbert) Séries d'Eisenstein et fonctions L de courbes elliptiques à multiplication complexe. [Eisenstein series and L functions of elliptic curves with complex multiplication] 82m:12007
 Gross, Benedict H. The annihilation of divisor classes in abelian extensions of the rational function field. (See 82m:10006)
 Hà Huy Khoai Sur une conjecture de Mazur et Swinnerton-Dyer. (English summary) 82i:12015
 Husemoller, D. Burnside ring of a Galois group and the relations between zeta functions of intermediate fields. 82j:12016
 Moroz, B. Z. On the convolution of Hecke L -functions. 82f:12020
 Ramakrishnan, Dinakar A regulator for curves via the Heisenberg group. 82m:12008
 Rohrlich, David E. Galois conjugacy of unramified twists of Hecke characters. 82a:12009
 Sato, Fumihiko Fonctions zeta associées à des espaces vectoriels préhomogènes. (See 82h:10004)
 Zeta functions in several variables associated with prehomogeneous vector spaces. I. Functional equations. 82m:12009a
 Zeta functions in several variables associated with prehomogeneous vector spaces. II. A convergence criterion. 82m:12009b
 Zeta functions in several variables associated with prehomogeneous vector spaces. III. Eisenstein series for indefinite quadratic forms. 82m:12009c
 Schappacher, Norbert See Goldstein, Catherine, 82m:12007
 Yoshida, Hiroyuki On Artin L -functions. 82g:12012

secondary classifications:

- Bloch, Spencer Applications of the dilogarithm function in algebraic K -theory and algebraic geometry. (82f:14009)
 Fröhlich, A. Galois module structure and rootnumbers for quaternion extensions of degree 2^n . (82k:12010)
 Grayson, Daniel R. Dilogarithm computations for K_3 . (82i:12012)
 Hoffstein, Jeffrey On the Siegel-Tatuzawa theorem. (82k:10050)
 Mazur, Barry On the arithmetic of special values of L functions. (82e:14033)
 Reich, Axel Werteverteilung von Zetafunktionen. (82b:10051)
 Rosen, Kenneth H. L -series for genera at $s=1$. (82a:10044)
 Schneider, Peter Über die Werte der Riemannschen Zetafunktion an den ganzzahligen Stellen. (82g:10057)
 Shintani, Takuro A proof of the classical Kronecker limit formula. (82f:10038)
 Tahtadjan, L. A. See Vinogradov, A. I., (82b:10050) and (82d:10038)
 Ulloa, Stephen V. Galois module structure for intermediate extensions. (82a:12007)
 Vignéras, Marie-France Variétés riemanniennes isospectrales et non isométriques. (82b:58102)
 Vinogradov, A. I. (with Tahtadjan, L. A.) On analogues of the Gauss-Vinogradov formula. (Russian) (82b:10050)
 (with Tahtadjan, L. A.) On the Gauss-Hasse hypothesis for real quadratic fields. (Russian) (82d:10038)
 Washington, Lawrence C. Zeros of p -adic L -functions. (See 82m:10006)
 Wieczorkiewicz, Jan K. Some remarks on a result of A. V. Sokolovskij. (82b:10052)

12A75 Density theorems

12A80 Arithmetic of algebras [See also 12B35, 16A18, 16A39.]

- Bushnell, Colin J. (with Reiner, Irving) L -functions of arithmetic orders. 82d:12008
 Draxl, Peter Corps gauches à involution de deuxième espèce. 82g:12013
 Fein, Burton (with Schacher, Murray) Divisible groups that are Brauer groups. 82k:12012
 Gräbe, Hans-Gert Über die Umkehraufgabe der reduzierten K -Theorie. 82c:12015
 Körner, Otto Über Anzahlmatrixen von Quaternionenordnungen und quadratischen Formen. 82f:12015
 Mollin, R. A. Cyclotomic division algebras. 82m:12010
 Murata, Kentaro A note on lattice theoretical divisor theory of a noncommutative semigroup. (See 82f:20008)
 Reiner, Irving See Bushnell, Colin J., 82d:12008
 Schacher, Murray See Fein, Burton, 82k:12012
 Schürer, Winfried Zur Existenz von Involutionen auf einfachen Algebren. II. 82k:12013
 Vignéras, Marie-France ★ Arithmétique des algèbres de quaternions. (French) [Arithmetic of quaternion algebras] 82i:12016
 Wilson, Stephen M. J. Some counterexamples in the theory of the Galois module structure of wild extensions. 82j:12017

secondary classifications:

- (Draxl, Peter) See SK_1 of division algebras. (82b:16014)
 Hashimoto, Ki-ichiro (with Ibukiyama, Tomoyoshi) On class numbers of positive definite binary quaternion Hermitian forms. (82j:10038)
 Ibukiyama, Tomoyoshi See Hashimoto, Ki-ichiro, (82j:10038)
 (Kneser, Martin) See SK_1 of division algebras, (82b:16014)
 Bielefeld $\star SK_1$ von Schiefkörpern. (German) [SK_1 of division algebras] (82b:16014)
 Division algebras $\star SK_1$ von Schiefkörpern. (German) [SK_1 of division algebras] (82b:16014)
 Göttingen $\star SK_1$ von Schiefkörpern. (German) [SK_1 of division algebras] (82b:16014)
 Seminar:
 SK_1 of Division Algebras $\star SK_1$ von Schiefkörpern. (German) [SK_1 of division algebras] (82b:16014)
 SK_1 of division algebras $\star SK_1$ von Schiefkörpern. (German) [SK_1 of division algebras] (82b:16014)

12A82 Zeta functions of algebras

Mollin, R. A. Subgroups of simple algebras and the zeta function. 82f:12021

12A85 Analysis in adèle rings and groups

- Raghavan, Srinivasacharya (with Rangachari, S. S.) Poisson formulae of Hecke type. 82m:12011
 Rangachari, S. S. See Raghavan, Srinivasacharya, 82m:12011

secondary classifications:

- Lachaud, Gilles Une présentation adélique de la série singulière et du problème de Waring. (82i:10067)

12A90 Arithmetic theory of algebraic function fields [See also 14-XX.]

- Becker, Ottfried Quasidoppelkörper. 82j:12018
 Goss, David The arithmetic of function fields. (See 82m:10006)
 Katsurada, Hidenori Generalized Hasse-Witt invariants and unramified Galois extensions of an algebraic function field. 82f:12022
 On unramified $SL_2(F_p)$ extensions of an algebraic function field of genus 2. 82k:12014
 Kubert, Daniel S. (with Lang, Serge) Units in the modular function field. V. Iwasawa theory in the modular tower. 82h:12016
 Lang, Serge See Kubert, Daniel S., 82h:12016
 Madan, Manohar L. (with Madden, Daniel J.) On the theory of congruence function fields. 82h:12011
 Madden, Daniel J. See Madan, Manohar L., 82h:12011

secondary classifications:

- Endo, Mikihiro The strong approximation theorem and locally bounded topologies of algebraic function fields. (82k:12028)

12A95 Totally real and totally positive fields

secondary classifications:

- Washington, Lawrence C. Zeros of p -adic L -functions. (See 82m:10006)

12A99 None of the above, but in this section

- Brunotte, Horst Bemerkungen zu einer metrischen Invarianten algebraischer Zahlkörper. (English summary) 82d:12009

secondary classifications:

- Mitsui, Takayoshi (with Tatzawa, Tikao) Sur un problème en théorie additive des nombres. (82m:10074)
 Tatzawa, Tikao See Mitsui, Takayoshi, (82m:10074)
 Tijdeman, R. Solvability of Diophantine equations. (82j:10036)

12Bxx Algebraic number theory: local and p -adic fields

- (Greenberg, Marvin Jay) See Serre, Jean-Pierre, 82e:12016
 Serre, Jean-Pierre \star Local fields. 82e:12016

12B05 Polynomials

secondary classifications:

- Schmidt, Wolfgang M. Simultaneous p -adic zeros of quadratic forms. (82h:10026)

12B10 Ramification and extension theory

- Buhler, J. P. A note on tamely ramified polynomials. 82e:12017
 Gordeev, N. L. Infiniteness of the number of relations in a Galois group of maximal p -extensions with bounded ramification of a local field. (Russian) 82k:12015
 Laubie, François Sur les nombres de ramification des extensions abéliennes des corps locaux. (English summary) 82g:12014
 Lubin, Jonathan The local Kronecker-Weber theorem. 82i:12017

12B15 Galois theory

- Dickert, Volker Abelsche p -Erweiterungen p -adischer Zahlkörper, über denen jedes Einbettungsproblem lösbar ist. 82k:12016
 Grigorjan, O. M. (with Lur'e, B. B.) Totally solvable imbedding problems with an abelian kernel for local fields. (Russian) 82b:12012
 Jannsen, Uwe (with Wingberg, Kay) Einbettungsprobleme und Galoisstruktur lokaler Körper. 82i:12018
 Lur'e, B. B. See Grigorjan, O. M., 82b:12012
 Matignon, Michel (with Reversat, Marc) Sur les automorphismes d'extensions transcendentes de corps valués. [On the automorphisms of transcendental extensions of valued fields] (See 82m:10006)
 Nguyen-Quang-Do Thong Sur les extensions quasi régulières de corps locaux. (English summary) 82h:12013
 Pak, G. K. Filtration of the group of principal units of a local function field as a Galois module. (Russian) 82g:12015
 Reversat, Marc See Matignon, Michel, (See 82m:10006)
 Rosen, Michael An elementary proof of the local Kronecker-Weber theorem. 82f:12023
 Wingberg, Kay See Jannsen, Uwe, 82i:12018

secondary classifications:

- Benabdallah, Khalid (with Roggenkamp, K. W.) Pure unital local principal ideal domains in local fields. (82g:13016)
 Roggenkamp, K. W. See Benabdallah, Khalid, (82g:13016)
 Waldschmidt, Michel Transcendance et exponentielles en plusieurs variables. (82k:10042)

12B17 Integral representations

- Fröhlich, A. (with Taylor, Martin J.) The arithmetic theory of local Galois Gauss sums for tame characters. 82h:12014
 Rosenbaum, Kurt On the structure of p -adic closure of cyclic extensions of local fields. 82k:12017
 Taylor, Martin J. See Fröhlich, A., 82h:12014

12B20 Galois cohomology [See also 12Gxx, 16A16.]

- Bartels, Hans-Jochen Zur Arithmetik von Konjugationsklassen in algebraischen Gruppen. 82j:12019
 Litvak, G. I. Nondegeneracy of the Tate pairing in Galois cohomology of finite modules over general local fields of zero characteristic. (Russian) 82d:12010
 Matignon, Michel Sous-corps fermés du complété de la clôture algébrique d'un corps local. 82i:12011
 Sen, Shankar Continuous cohomology and p -adic Galois representations. 82e:12018
 Zink, Ernst-Wilhelm Weil-Darstellungen und lokale Galois-theorie. 82g:12016

secondary classifications:

- Bégueri, Lucile Dualité sur un corps local à corps résiduel algébriquement clos. (English summary) (82k:12019)
 Fontaine, Jean-Marie Modules galoisiens, modules filtrés et anneaux de Barsotti-Tate. (82k:14046)
 Gordeev, N. L. Infiniteness of the number of relations in a Galois group of maximal p -extensions with bounded ramification of a local field. (Russian) (82k:12015)
 Hattori, Akira On Amitsur cohomology of rings of algebraic integers. (82h:12012)
 Jannsen, Uwe (with Wingberg, Kay) Einbettungsprobleme und Galoisstruktur lokaler Körper. (82i:12018)
 Perrin-Riou, Bernadette Plongement d'une extension diédrale dans une extension diédrale ou quaternionienne. (82k:12002)
 Stuhler, Ulrich On the connection between Brauer group and Tate-Shafarevich group. (82k:14027)
 Wingberg, Kay See Jannsen, Uwe, (82i:12018)

12B22 Applications of algebraic K -theory

- Keune, Frans Another presentation for the K_2 of a local domain. 82k:12018

secondary classifications:

- Oliver, Robert SK_1 for finite group rings. II. (82m:18006a)
 SK_1 for finite group rings. III. (82m:18006b)
 Correction to: " SK_1 for finite group rings. I" [Invent. Math. 57 (1980), no. 2, 183-204; MR 81f:18031]. (82j:18019)

12B25 Class field theory

- Bégueri, Lucile Dualité sur un corps local à corps résiduel algébriquement clos. (English summary) 82k:12019
 Hamada, Suguru Some remarks on the Lubin-Tate extensions. 82b:12015
 On the conductors of p -cyclic Kummer extensions of local number fields. 82h:12017
 Hennart, Guy Lois de réciprocité explicites. 82i:12019
 Lecko, V. A. See Vostokov, S. V., 82i:12020 and 82m:12012
 Morava, Jack The Weil group as automorphisms of the Lubin-Tate group. 82g:12017
 Sen, Shankar On explicit reciprocity laws. II. 82f:12024
 Vostokov, S. V. (with Lecko, V. A.) Canonical decomposition in the group of points of a Lubin-Tate formal group. (Russian) 82i:12020
 (with Lecko, V. A.) The Hilbert symbol in an extension of the field of 2-adic numbers. (Russian) 82m:12012

secondary classifications:

- Contou-Carrère, Carlos E. Corps de classes local géométrique relatif. (English summary) (82k:14029)

- Cornell, Gary Abhyankar's lemma and the class group. (82c:12007)
 Diekert, Volker Abelsche p -Erweiterungen p -adischer Zahlkörper, über denen jedes Einbettungsproblem lösbar ist. (82b:12016)
 Greenberg, Ralph On the Jacobian variety of some algebraic curves. (82j:14036)
 Harewink, Michiel ★ Formal groups and applications. (82a:14020)
 Kanesaka, Kiyomi (with Sekiguchi, Koji) Representation of Witt vectors by formal power series and its applications. (82m:12015)
 Nguyen-Quang-Do Thong Sur les extensions quasi régulières de corps locaux. (English summary) (82b:12013)
 Rosenbaum, Kurt On the structure of p -adic closure of cyclic extensions of local fields. (82b:12017)
 Sekiguchi, Koji See Kanesaka, Kiyomi. (82m:12015)

12B27 Langlands-Weil conjectures, nonabelian class field theory [See also 10Dxx, 22E50.]

- Henniart, Guy Comptage de représentations de groupes de Galois locaux. 82c:12012
 Koch, Helmut On the local Langlands conjecture for central division algebras of index p . 82c:12013
 On the local Langlands conjecture. (See 82j:10004)
 Kutzko, Philip The Langlands conjecture for GL_2 of a local field. 82c:12019

secondary classifications:

- Casselman, W. The Hasse-Weil ζ -function of some moduli varieties of dimension greater than one. (82c:10046)
 Gérardin, Paul (with Kutzko, Philip) Facteurs locaux pour $GL(2)$. (82c:22020)
 Jacquet, Hervé (with Piatetski-Shapiro, Ilya Iosifovitch; Shalika, Joseph) Facteurs L et ϵ du groupe linéaire: théorie archimédienne. (English summary) [L - and ϵ -factors for the linear group: Archimedean theory] (82c:22021)
 Kutzko, Philip See Gérardin, Paul. (82c:22020)
 Piatetski-Shapiro, Ilya Iosifovitch See Jacquet, Hervé; et al., (82c:22021)
 Shalika, Joseph See Jacquet, Hervé; et al., (82c:22021)

12B30 Zeta and L -functions [See also 10H08, 10H10.]

- Gross, Benedict H. On the factorization of p -adic L -series. 82a:12010
 Imai, Hideo On the construction of p -adic L -functions. 82m:12013
 Katz, Nicholas M. Another look at p -adic L -functions for totally real fields. 82j:12020
 Washington, Lawrence C. Zeros of p -adic L -functions. (See 82m:10006)

secondary classifications:

- Kawasaki, Toshikazu On the class number of real quadratic fields. (82g:12006)

12B35 Arithmetic of algebras [See also 12A80, 16A18, 16A39.]

- Draxl, Peter SK, bei vollständig diskret bewerteten Körpern. (See 82b:16014)
 SK, bei zweifach vollständig diskret bewerteten Körpern. (See 82b:16014)
 SK, von Schiefkörpern über beliebig-rangig Henselsch bewerteten Körpern. (See 82b:16014)
 Kneser, Martin Schiefkörper über vollständig diskret bewerteten Körpern. (See 82b:16014)

secondary classifications:

- Platonov, V. P. Reduced K -theory for n -fold Henselian fields. (Russian) (82c:12026)

12B37 Zeta functions of algebras

- Rose, Julian On zeta functions of matrix algebras and distributions. 82g:12018

12B40 Other analytic theory

- (Amice, Y.) See Study Group: Ultrametric Analysis, 82g:12019
 Barsky, Daniel On Morita's p -adic gamma function. 82a:12011
 (Christol, Gilles) See Study Group: Ultrametric Analysis, 82g:12019
 Diamond, Jack Hypergeometric series with a p -adic variable. 82k:12020
 Dwork, B. Arithmetic theory of differential equations. 82j:12021
 Kaljužnyi, V. N. Representations of a p -adic circle. (Russian) 82k:12021
 Koblitz, Neal ★ p -adic analysis: a short course on recent work. 82c:12014
 q -extension of the p -adic gamma function. 82a:12012
 Mináč, Ján Some counterexamples in p -adic analysis. (Russian summary) 82f:12025
 Onneweer, C. W. On pointwise differentiability of functions on a p -adic or p -series field. 82b:12016
 Robba, Philippe Lemmes de Hensel pour les opérateurs différentiels. Application à la réduction formelle des équations différentielles. Application à la réduction formelle des équations différentielles. (See also Study Group: Ultrametric Analysis, 82g:12019)
 Sarmant-Durix, Marie-Claude Décomposition en produit de facteurs de fonctions méromorphes. (English summary) 82b:12017
 Sibuya, Yasutaka (with Sperber, Steven) Arithmetic properties of power series solutions of algebraic differential equations. 82j:12022
 Sperber, Steven See Sibuya, Yasutaka, 82j:12022
 Paris ★ Groupe d'Étude d'Analyse Ultramétrique. 7e-8e années: 1979-1981. (French) [Study Group on Ultrametric Analysis. 7th-8th years: 1979-1981] 82g:12019
 Study Group
 Ultrametric Analysis ★ Groupe d'Étude d'Analyse Ultramétrique. 7e-8e années: 1979-1981. (French) [Study Group on Ultrametric Analysis. 7th-8th years: 1979-1981] 82g:12019

secondary classifications:

- Dwork, B. Hypergeometric functions as p -adic analytic functions. (See 82m:10006)

- Jain, Pawan Kumar On bases in spaces over non-Archimedean fields. (82j:46092)
 Kankurikar, R. S. On a generalization of Raghunathan's space of entire functions. I. (Italian summary) (82j:46093)
 Lippman, G. E. (with Wade, William R.) Pseudofunctions and uniqueness on the group of integers of a p -series field. (82b:43011)
 Pearson, Robert B. Number theory and critical exponents. (82a:82018)
 van der Put, Marius Meromorphic differential equations over valued fields. (82m:34064)
 Schikhof, W. H. p -adic monotone functions. (82b:26025)
 Sunčeev, R. R. s -numbers of a completely continuous operator. (Russian) (82a:46082)
 Taibleson, Mitchell H. Majorization of functions in $H^1(K^n)$, K a local field. (Russian summary) (82m:43005)
 Wade, William R. See Lippman, G. E., (82b:43011)

12B45 Other nonanalytic theory

12B99 None of the above, but in this section

- Monsky, Paul On p -adic power series. 82b:12018

secondary classifications:

- Jarden, Moshe (with Roquette, Peter) The Nullstellensatz over p -adically closed fields. (82g:14027)
 Roquette, Peter See Jarden, Moshe, (82g:14027)

12Cxx Finite fields, and finite commutative rings (number-theoretic aspects)

- Lüneburg, Heinz ★ Galoisfelder, Kreisteilungskörper und Schieberegisterfolgen. (German) [Galois fields, cyclotomic fields and shift-register sequences] 82b:12018

12C05 Polynomials

- Agou, Simon Sur le degré minimum de certains polynômes hyponormaux sur un corps fini. [On the minimum degree of certain hyponormal polynomials on a finite field] (See 82j:10003)
 Sur la factorisation des polynômes $f(X^{p^r} - aX^{p^s} - bX)$ sur un corps fini F_{p^r} . 82b:12019
 Beard, Jacob T. B., Jr. (with Harbin, Mickie Sue) Nonsplitting unitary perfect polynomials over $GF(q)$. (Italian summary) 82d:12011
 Cantor, David G. (with Zassenhaus, Hans) A new algorithm for factoring polynomials over finite fields. 82c:12020
 Ceccherini, P. V. (with Hirschfeld, J. W. P.) On the number of zeros over a finite field of certain symmetric polynomials. 82c:12021
 Harbin, Mickie Sue See Beard, Jacob T. B., Jr., 82d:12011
 Hirschfeld, J. W. P. See Ceccherini, P. V., 82c:12021
 Liang, Joseph J. On the solutions of trinomial equations over finite fields. 82b:12020
 Mullen, Gary L. Equivalence classes of sets of functions over a finite field. 82b:12021
 Zassenhaus, Hans See Cantor, David G., 82c:12020

secondary classifications:

- Cherly, J. On complementary sets of group elements. (82j:20095)
 Ecker, A. How to compute the minimum distance for cyclic AN -codes over an arbitrary base. I. Elementary methods. (82j:94019)
 Goldberg, Donald Y. A generalized weight for linear codes and a Witt-MacWilliams theorem. (82c:94052)
 Golomb, Solomon W. Obtaining specified irreducible polynomials over finite fields. (82a:94064)
 Hershey, John E. Implementation of Mitre public key cryptographic system. (82a:94088)
 Ja' Ja', Joseph Computation of bilinear forms over finite fields. (82a:68074)
 Kochanski, M. J. Remarks on Lu and Lee's proposals for a public-key cryptosystem. (82a:94089)
 Krishnamurthy, E. V. (with Ramachandran, Vijaya) A cryptographic system based on finite field transforms. (82c:94062)
 Miller, J. C. P. On rotational tessellations and cosets. (82c:05056)
 Miller, Robert L. (with Reed, I. S.; Truong, T. K.) A theorem for computing primitive elements in the field of complex integers of a characteristic Mersenne prime. (82b:12022)
 Nečev, A. A. Polynomial transformations of finite commutative local principal ideal rings. (Russian) (82b:13013)
 Ramachandran, Vijaya See Krishnamurthy, E. V., (82c:94062)
 Reed, I. S. See Miller, Robert L.; et al., (82b:12022)
 Rice, Bart Winograd convolution algorithms over finite fields. (82g:68031)
 Truong, T. K. See Miller, Robert L.; et al., (82b:12022)

12C10 Linear sequences

12C15 Arithmetic

- Burde, Klaus Ein Reziprozitätsgesetz in Galoisfeldern. 82c:12022
 Miller, Robert L. (with Reed, I. S.; Truong, T. K.) A theorem for computing primitive elements in the field of complex integers of a characteristic Mersenne prime. 82b:12022
 Reed, I. S. See Miller, Robert L.; et al., 82b:12022
 Truong, T. K. See Miller, Robert L.; et al., 82b:12022

secondary classifications:

- Car, Mireille La méthode des sommes trigonométriques pour $F_q[X]$. (82k:10061)

12C20 Cyclotomy

secondary classifications:

- Agrawal, M. K. See Parnami, J. C.; et al., (82g:10054)
 Belov, N. V. See Rau, V. G.; et al., (82e:10023) and (82i:10016)
 Ilyuhin, V. V. See Rau, V. G.; et al., (82e:10023) and (82i:10016)
 Parhomov, L. G. See Rau, V. G.; et al., (82e:10023) and (82i:10016)
 Parnami, J. C. (with Agrawal, M. K.; Rajwade, A. R.) A congruence relation between the coefficients of the Jacobi sum. (82g:10054)
 Pei, Soo Chang (with Wu, Ja Ling) Fast biased polynomial transforms for two-dimensional convolutions. (82h:94005)
 Rajwade, A. R. See Parnami, J. C.; et al., (82g:10054)
 Rau, V. G. (with Parhomov, L. G.; Ilyuhin, V. V.; Belov, N. V.) On the number of possible Patterson cyclotomic sets. (Russian) (82e:10023)
 (with Parhomov, L. G.; Ilyuhin, V. V.; Belov, N. V.) On the calculation of Patterson cyclotomic sets. (Russian) (82i:10016)
 Wu, Ja Ling See Pei, Soo Chang, (82h:94005)

12C25 Exponential sums

- Carlitz, L. Evaluation of some exponential sums over a finite field. 82e:12023
 Moreno, Oscar Counting traces of powers over $GF(2^m)$. 82e:12024

secondary classifications:

- Ono, Takashi On certain numerical invariants of mappings over finite fields. I. (82f:10051a)
 On certain numerical invariants of mappings over finite fields. II. (82f:10051b)
 On certain numerical invariants of mappings over finite fields. III. (82f:10051c)
 On certain numerical invariants of mappings over finite fields. IV. (82f:10051d)
 On certain numerical invariants of mappings over finite fields. V. (82f:10051e)

12C30 Structure theory

- Giudici, Reinaldo E. (with Margaglio, Claudio) A geometric characterization of the generators in a quadratic extension of a finite field. 82f:12026
 Margaglio, Claudio See Giudici, Reinaldo E., 82f:12026

12C99 None of the above, but in this section

- Cooper, R. H. Linear transformations in Galois fields and their application to cryptography. 82a:12012

secondary classifications:

- Kung, Joseph P. S. The cycle structure of a linear transformation over a finite field. (82d:15012)
 Mullen, Gary L. Equivalence classes of sets of functions over a finite field. (82b:12021)

12Dxx Real and complex fields

12D05 Polynomials: factorization

- Barnett, Stephen Greatest common divisors from generalized Sylvester resultant matrices. 82e:12015
 Moh, T. T. On a certain group structure for polynomials. 82e:12025
 Valabrega, Elda Gibellato More on the reals of Jean Dieudonné. (Italian. English summary) 82h:12019
 Viry, Guy Factorisation des polynômes à plusieurs variables. (English summary) 82e:12016

secondary classifications:

- Brenner, J. L. (with Lyndon, Roger C.) Proof of the fundamental theorem of algebra. (82e:30010)
 Kučera, Vladimír Assigning the invariant factors by feedback. (82h:93009)
 Lyndon, Roger C. See Brenner, J. L., (82e:30010)
 Pernebo, Lars An algebraic theory for the design of controllers for linear multivariable systems. I. Structure matrices and feedforward design. (82h:93017a)
 An algebraic theory for the design of controllers for linear multivariable systems. II. Feedback realizations and feedback design. (82h:93017b)
 Wavrik, John Computers and the multiplicity of polynomial roots. (82m:12002)

12D10 Polynomials: location of zeros (algebraic theorems) {For the analytic theory, see 26C10, 30C15.}

- Aizenberg, L. A. (with Bolotov, V. A.; Cih, A. K.) On the solution of systems of nonlinear algebraic equations using the multidimensional logarithmic residue. Solvability in radicals. (Russian) 82d:12013
 Bolotov, V. A. See Aizenberg, L. A.; et al., 82d:12013
 Cih, A. K. See Aizenberg, L. A.; et al., 82d:12013
 Craven, Thomas C. (with Csordas, George) Zero-diminishing linear transformations. 82a:12013
 Csordas, George See Craven, Thomas C., 82a:12013
 Gupta, Ram Niwas Other two roots of a normal cubic. 82e:12017
 Millett, T. (with Tang, I.) Using innerers to determine multiple roots of polynomials. 82i:12021
 Postnikov, M. M. ★Устойчивые многочлены. (Russian) [Stable polynomials] 82k:12023
 Tang, I. See Millett, T., 82i:12021

secondary classifications:

- Hovanskii, A. G. Newton polyhedra and the Euler-Jacobi formula. (Russian) (82g:32015)
 Južakov, A. P. Calculation of the sum of values of a polynomial in solutions of a system of algebraic equations. (Russian) (82j:32010)
 Moh, T. T. On a certain group structure for polynomials. (82e:12025)

12D15 Formally real fields

- Jacob, Bill On the structure of Pythagorean fields. 82j:12020
 Fans, real valuations, and hereditarily-Pythagorean fields. 82j:12023
 Piscosa Hermosa, Francisco Mario The strong approximation property in formally real fields. (Spanish. English summary) 82k:12024
 Prestel, Alexander Sums of squares over fields. 82a:12014
 Szczepaniak, Lucyna Quadratic forms over quadratic extensions of some fields. (Polish summary) 82e:12018

secondary classifications:

- Brown, Ron Powers of the augmentation ideal in the Witt ring of a field. (82i:10023)
 (with Marshall, Murray) The reduced theory of quadratic forms. (82j:10037)
 Goltz, Hans-Joachim Untersuchungen zur Elimination verallgemeinerter Quantoren in Körpertheorien. (English, Russian and French summaries) (82j:03032)
 Jacob, Bill The model theory of "R-formal" fields. (82h:03068)
 The model theory of generalized real closed fields. (82m:03047)
 Knebusch, Manfred An algebraic proof of the Borsuk-Ulam theorem for polynomial mappings. (82m:14012)
 Lam, T. Y. The theory of ordered fields. (82e:12033)
 Marshall, Murray See Brown, Ron, (82j:10037)
 Sladek, Andrzej Abstract theory of quadratic forms. (Polish summary) (82f:10023)
 Stability in the abstract theory of quadratic forms. (Polish summary) (82f:10024)
 Śliwiak, Marian On positive definite rational functions over a real closed field. (Polish summary) (82e:10020)
 Toffalori, Carlo Sheaves of pairs of real closed fields. (82m:03048)

12D99 None of the above, but in this section

secondary classifications:

- Avalov, G. V. Polylinear realization of input-output mappings. (Russian) (82h:93014)
 Bolotov, V. A. Correspondence between roots and coefficients of multidimensional systems of algebraic equations. (Russian) (82j:32012)
 Jacob, Bill A nullstellensatz for $R((t))$. (82e:13006)
 Kahane, Jean-Pierre The 13th Hilbert problem and analytic functions. (82h:58004)

12Exx General field theory

12E05 Polynomials (irreducibility, etc.)

- Bastos, G. G. (with Sankaran, N.) Analogue of Greenberg's theorem for Henselian fields of finite rank. 82d:12014
 Girstmair, Kurt On relations between zeros of Galois polynomials. 82k:12025
 Griffiths, H. B. Cayley's version of the resultant of two polynomials. 82h:12020
 Sankaran, N. See Bastos, G. G., 82d:12014
 Tropak, Bogdan On division with the remainder in $K[x_1, \dots, x_k]$. 82e:12019

secondary classifications:

- Norris, Michael J. (with Vélez, William Yslas) Structure theorems for radical extensions of fields. (82i:12022)
 Vélez, William Yslas See Norris, Michael J., (82i:12022)

12E10 Special polynomials

- Dean, Richard A. A rational polynomial whose group is the quaternions. 82h:12021
 Norris, Michael J. (with Vélez, William Yslas) Structure theorems for radical extensions of fields. 82i:12022
 Vélez, William Yslas See Norris, Michael J., 82i:12022

secondary classifications:

- Brauer, Richard Symmetrische Funktionen. Invarianten von linearen Gruppen endlicher Ordnung. (82i:13001)
 Girstmair, Kurt On root polynomials of cyclic cubic equations. (82h:12005)

12E12 Equations

12E15 Skew fields, division rings [See also 12A80, 12B35, 16A39.]

- Estrada Navas, Luis Splitting fields of Brauer algebras. 82j:12024
 Fein, Burton (with Schacher, Murray) Relative Brauer groups. I. 82f:12027
 Platonov, V. P. Reduced K-theory for n -fold Henselian fields. (Russian) 82e:12026
 Schacher, Murray See Fein, Burton, 82f:12027
 Sonn, Jack Rational division algebras as solvable crossed products. 82e:12027

secondary classifications:

- Doneddu, Alfred Extensions hexaphiques des corps non commutatifs. (English summary) [Hexaphic extensions of division rings] (82m:16015)
 Draxl, Peter Eigenschaften von SK_1 und "vernünftige" Körper. (See 82h:16014)
 Eine Liftung der Dieudonné-Determinante und Anwendungen die multiplikative

Gruppe eines Schiefkörpers betreffend. (See 82b:16014)

See also Stuhler, Ulrich. (See 82b:16014)

Estrada Navas, Luis Brauer algebras. (Spanish. English summary) (82f:16003)

(Kneser, Martin) See Stuhler, Ulrich. (See 82b:16014)

Stuhler, Ulrich Normen und Spuren in assoziativen Algebren. (See 82b:16014)

Tignol, J.-P. Corps à involution neutralisés par une extension abélienne élémentaire. (82b:16013)

12E99 None of the above, but in this section

May, Warren Fields with free multiplicity groups modulo torsion. 82f:12028

12Fxx Field extensions

12F05 Algebraic extensions

Ash, C. J. (with Nerode, Anil) Functorial properties of algebraic closure and Skolemization. 82m:12014

Gay, David A. (with Vélaz, William Yslas) The torsion group of a radical extension. 82b:12022

Isaacs, I. Martin Roots of polynomials in algebraic extensions of fields. 82b:12023

Nerode, Anil See Ash, C. J., 82m:12014

Ogai, S. V. (with Poluljah, A. K.) Estimation of the number of subfields of index two of a hyperelliptic field. (Russian) 82b:12023

Poluljah, A. K. See Ogai, S. V., 82b:12023

Takahashi, Toyofumi On automorphism groups of global fields. (Japanese) 82f:12029

Vélaz, William Yslas See Gay, David A., 82b:12022

secondary classifications:

May, Warren Fields with free multiplicity groups modulo torsion. (82f:12028)

Sibuya, Yasutaka (with Sperber, Steven) Some new results on power-series solutions of algebraic differential equations. (82d:34072)

Sperber, Steven See Sibuya, Yasutaka. (82d:34072)

12F10 Separable extensions, Galois theory

Childs, Lindsay N. (with Orzech, Morris) On modular group rings, normal bases, and fixed points. 82j:12025

Doudy, Adrien See Doudy, Régine, 82b:12024

Doudy, Régine (with Doudy, Adrien) ★Algèbre et théories galoisiennes. 1. (French) [Algebra and Galois theories. 1] 82b:12024a

(with Doudy, Adrien) ★Algèbre et théories galoisiennes. 2. (French) [Algebra and Galois theories. 2] 82b:12024b

Endô, Shizuo (with Miyata, Takehiko) Corrigenda: "On a classification of the function fields of algebraic tori" [Nagoya Math. J. 56 (1975), 85–104; MR 51 # 458]. 82e:12028

Halter-Koch, Franz Über Radikalerweiterungen. 82g:12021

Eine Galois-Korrespondenz für Radikalerweiterungen. 82g:12022

Ishanov, V. V. On the semidirect imbedding problem with a metabelian kernel. (Russian) 82b:12030

Kanesaka, Kiyomi (with Sekiguchi, Koji) Representation of Witt vectors by formal power series and its applications. 82m:12015

Miyata, Takehiko See Endô, Shizuo, 82e:12028

Orzech, Morris See Childs, Lindsay N., 82j:12025

Sekiguchi, Koji See Kanesaka, Kiyomi, 82m:12015

Triantaphyllou, Deborah Diller Invariants of finite groups acting nonlinearly on rational function fields. 82e:12020

Zjapkov, N. P. A problem on the imbedding of fields. (Bulgarian. French summary) 82j:12023

secondary classifications:

Almkvist, Gert Representations of $\mathbb{Z}/p\mathbb{Z}$ in characteristic p and reciprocity theorems. (82i:14047)

Land, Rudolf Computation of Pólya polynomials of primitive permutation groups. (82e:20010)

La Roche, Peter Effective Galois theory. (82j:03053)

Voda, Viorel Gh. A solvable case of the equation of degree five. (Romanian) (82e:10030)

Watanabe, Tetsuro On a characterization of the solvable groups of Galois type. (82a:20045)

12F15 Inseparable extensions, derivations

Bastida, Julio R. On derivations of fields of algebraic functions. 82j:12026

Deveney, James K. (with Mordeson, John N.) Inseparable extensions and primary abelian groups. 82a:12015

Induced spaces of derivations. 82b:12024

(with Mordeson, John N.) Distinguished subfields. 82a:12016

(with Mordeson, John N.) Calculating invariants of inseparable field extensions. 82b:12029

Eke, B. I. Some remarks on modular field extensions with subbases. 82i:12023

Heerema, Nicholas Maximal separable intermediate fields of large codegree. 82j:12027

Higher derivation Galois theory of fields. 82i:12024

Mordeson, John N. Modular extensions and abelian groups. 82j:12028

See also Deveney, James K., 82a:12015; 82a:12016 and 82e:12029

Suzuki, Satoshi Some types of derivations and their applications to field theory. 82k:12026

12F20 Transcendental extensions

Fein, Burton (with Schacher, Murray) Brauer groups of rational function fields over global fields. 82b:12025

Madan, Manohar L. See Valentini, Robert C., 82e:12030

Schacher, Murray See Fein, Burton, 82b:12025

Valentini, Robert C. (with Madan, Manohar L.) A Hauptsatz of L. E. Dickson and Artin-Schreier extensions. 82e:12030

secondary classifications:

Heerema, Nicholas Maximal separable intermediate fields of large codegree. (82j:12027)

Suzuki, Satoshi Some types of derivations and their applications to field theory. (82k:12026)

12F99 None of the above, but in this section

secondary classifications:

Moh, T. T. On the bound for the Defranchis-Severi theorem. (82j:14030)

12Gxx Homological methods

12G05 Galois cohomology [See also 12A60, 12B20, 13A20, 16A16.]

Wurfel, Tilmann On the divisible part of the Brauer group of a field. 82m:12016

secondary classifications:

Bereznyi, A. E. Discrete groups with subexponential growth of coefficients of the Golod-Shafarevich series. (Russian) (82k:20064)

Bürgisser, Balz On the p -periodicity of arithmetic subgroups of general linear groups. (82b:20064a)

Finite p -periodic quotients of general linear groups. (82b:20064b)

Eršov, Ju. L. On profinite groups. (Russian) (82k:20052)

Hattori, Akira Some arithmetical applications of groups $H^*(R, G)$. (82g:12009)

Osterholz, D. Der Trägheitschiefskörper. (See 82b:16014)

12G10 Cohomological dimension

12G99 None of the above, but in this section

secondary classifications:

Wurfel, Tilmann Ein Freiheitskriterium für pro- p -Gruppen mit Anwendung auf die Struktur der Brauer-Gruppe. (82e:20057)

12Hxx Differential and difference algebra

12H05 Differential algebra [See also 13N05.]

Cassidy, Phyllis J. Differential algebraic group structures on the plane. 82g:12024

Cohn, Richard M. Specializations of differential kernels and the Ritt problem. 82e:12021

Davenport, J. H. Algorithms for the integration of algebraic functions. 82g:12025

Drjuma, V. S. On the problem of reduction for nonlinear equations integrable by the method of the inverse problem of scattering theory. (Russian) 82j:12029

Epstein, H. I. A natural structure theorem for complex fields. 82e:12025

Gorbacuk, O. L. (with Komarnic'kii, M. Ja.) Torsion and differentially-closed fields. (Russian) 82e:12031

Grigorenko, N. V. A criterion for solvability in quadratures and the direct problem of Galois theory for linear differential equations. (Russian) 82j:12030

Two problems of the Galois theory of differential fields for a field of formal power series. (Russian) 82e:12032

Komarnic'kii, M. Ja. See Gorbacuk, O. L., 82e:12031

Kung, Joseph P. S. (with Rota, Gian-Carlo) On the differential invariants of a linear ordinary differential equation. 82i:12026

Matsuda, Michihiko ★First-order algebraic differential equations. 82d:12015

Nishioka, Keiji A theorem of Painlevé on parametric singularities of algebraic differential equations of the first order. 82g:12026

Polzat, Bruno Les équations différentielles vues par un logicien. 82g:12027

Pommaret, Jean-François Théorie de Galois différentielle. (English summary) 82f:12031

Théorie de Galois des systèmes dynamiques. (English summary) 82g:12028

Algèbre différentielle formelle. (English summary) 82j:12027

Rosenlicht, Maxwell Differential valuations. 82a:12017

Rota, Gian-Carlo See Kung, Joseph P. S., 82i:12026

Shikishima, Kayoko Universal extension of a differential field of positive characteristic. (Japanese summary) 82j:12031

Singer, Michael F. Liouvillian solutions of n th order homogeneous linear differential equations. 82i:12028

Trager, Barry M. Integration of simple radical extensions. 82j:12032

Vinogradov, M. M. Field extensions and extensions of linear differential operators. (Russian) 82m:12017

secondary classifications:

Daniljuk, V. I. (with Sibirskii, K. S.) Syzygies between centroaffine invariants of a quadratic differential system. (Russian) (82f:34005)

Kasper, Toni Integration in finite terms: the Liouville theory. (82c:01075)

Lebedev, D. R. (with Manin, Ju. I.) Conservation laws and Lax representation of Benney's long wave equations. (82c:35069)

Manin, Ju. I. See Lebedev, D. R., (82c:35069)

McGuinness, Mark J. Noether's theorem and infinities of polynomial conserved densities. (82f:35167)

Nowicki, Andrzej The primary decomposition of differential modules. (82g:13023)

Oka, Masatoshi Classifications of two-dimensional homogeneous cubic differential equation systems. I. (82c:34043a)

Classifications of two-dimensional homogeneous cubic differential equation systems. II. (82c:34043b)

Osgood, Charles F. The approximation of solutions to linear homogeneous differential equations by rational functions. (82c:10044)

Differential algebra and the simultaneous approximation by rational functions of power series solutions to algebraic functional equations. (82m:10055)

Pommaret, Jean-François Differential Galois theory. (82e:35004)

Rota, Gian-Carlo (with Sagan, Bruce; Stein, Paul R.) A cyclic derivative in noncommutative algebra. (82b:05017)

Sagan, Bruce See Rota, Gian-Carlo; et al., (82b:05017)

Sibirskii, K. S. See Daniljuk, V. I., (82f:34005)

Stein, Paul R. See Rota, Gian-Carlo; et al., (82b:05017)

Tu, Gui Zhang A commutativity theorem of partial differential operators. (82b:47060)

12H10 Difference algebra [See also 39Axx.]

Karr, Michael Summation in finite terms. 82m:12018

12H20 Abstract differential equations [See also 34Gxx.]

secondary classifications:

Nishioka, Keiji A theorem of Painlevé on parametric singularities of algebraic differential equations of the first order. (82g:12026)

12H25 p -adic differential equations [See also 12B40, 14G20, 34Gxx.]

Christol, Gilles Systèmes différentiels linéaires p -adiques, structure de Frobenius faible. (English summary) 82c:12027

secondary classifications:

Dwork, B. Arithmetic theory of differential equations. (82j:12021)

Robba, Philippe Lemmes de Hensel pour les opérateurs différentiels. Application à la réduction formelle des équations différentielles. (82k:12022)

Sibuya, Yasutaka (with Sperber, Steven) Arithmetic properties of power series solutions of algebraic differential equations. (82j:12022)

Sperber, Steven See Sibuya, Yasutaka, (82j:12022)

12H99 None of the above, but in this section

secondary classifications:

Boshernitzan, Michael An extension of Hardy's class L of "orders of infinity". (82m:26002)

12Jxx Topological fields

12J05 Normed fields

Cohen, Jo-Ann Topologies on the ring of integers of a global field. 82j:12033

Vizitiu, V. N. Continuation of pseudonorms of fields. (Russian) 82j:12034

Wiśław, Witold Embeddings of fields in complete ones. 82c:12022

12J10 Valued fields [See also 10M10.]

Tabná, Mohamed Corps linéairement compacts. (English summary) 82c:12023

secondary classifications:

Basarab, Șerban A. Some model theory for Henselian valued fields. (82m:03046)

Carter, David S. (with Vogt, Andrew) Collinearity-preserving functions between Desarguesian planes. (82c:51006)

Marchisa, Giuseppe A sufficient condition for the continuity of the zeros of polynomials with coefficients in a topological field. (Italian. English summary) (82b:10070)

Matignon, Michel Sous-corps fermés du complet de la clôture algébrique d'un corps local. (82c:12011)

Vogt, Andrew See Carter, David S., (82c:51006)

12J15 Ordered fields [See also 10M15.]

Lam, T. Y. The theory of ordered fields. 82c:12033

secondary classifications:

Delon, Françoise Hensel fields in equal characteristic $p > 0$. (82g:03058)

Schwartz, Niels Archimedean lattice-ordered fields that are algebraic over their σ -subfields. (82e:06018)

12J17 Topological semi-fields

12J20 General valuation theory

Weber, Hans Zu einem Problem von H. J. Kowalsky. 82m:12019

12J25 Non-Archimedean valued fields [See also 26E30, 30G05, 32D25, 46P05.]

secondary classifications:

Mahler, Kurt On two definitions of the integral of a p -adic function. (82b:26024)

12J27 Krasner-Tate algebras [See mainly 32E27, also 46P05.]

12J99 None of the above, but in this section

Basarab, Șerban A. Model-theoretic methods in the theory of Henselian-valued fields. (Romanian. English summary) 82c:12034

Model-theoretic methods in the theory of Henselian-valued fields. II. (Romanian. English summary) 82c:12035

Endo, Mikihiro The strong approximation theorem and locally bounded topologies of algebraic function fields. 82c:12028

Todorov, T. D. Asymptotic numbers. I. Algebraic properties. (Russian summary) 82c:12036

secondary classifications:

Prestel, Alexander (with Ziegler, Martin) Nonaxiomatizable classes of V -topological fields. (82b:03073)

Ziegler, Martin See Prestel, Alexander, (82b:03073)

12Kxx Generalizations

12K05 Near-fields [See also 16A76.]

So, Yong Sian Polynomial near-fields? 82k:12029

Wefelscheid, Heinrich Zur Planarität von KT-Fastkörpern. 82c:12026

secondary classifications:

Cohen, Stephen D. (with Ganley, Michael J.; Jha, Vikram) On transitive automorphism groups of finite quasifields. (82e:51016)

Ganley, Michael J. See Cohen, Stephen D.; et al., (82e:51016)

Gerla, Giangiacomo (with Lettieri, Ada) Near-fields of infinite dimension over their own nucleus. (Italian. English summary) (82e:51008)

Jha, Vikram On the derivability of field transitive quasifields. (82c:51003)

See also Cohen, Stephen D.; et al., (82e:51016)

Lettieri, Ada See Gerla, Giangiacomo, (82e:51008)

12K10 Semi-fields [See also 16A78.]

12K99 None of the above, but in this section

12Lxx Connections with logic

12L05 Decidability

Delon, Françoise Définition de l'arithmétique dans la théorie des anneaux de séries formelles. (English summary) 82a:12018

secondary classifications:

Cherlin, Gregory (with van den Dries, Lou; Macintyre, Angus) Decidability and undecidability theorems for PAC-fields. (82g:03057)

Cowles, John R. Generalized Archimedean fields and logics with Mal'cev quantifiers. (82b:03032)

van den Dries, Lou New decidable fields of algebraic numbers. (82b:03027)

Some model theory and number theory for models of weak systems of arithmetic. (82f:03029)

See also Cherlin, Gregory; et al., (82g:03057)

Eklöf, Paul C. (with Mekler, Alan H.) Stationary logic of finitely determinate structures. (82f:03033)

Eršov, Ju. I. On the elementary theories of regularly closed fields. (Russian) (82b:03010)

Goltz, Hans-Joachim Untersuchungen zur Elimination verallgemeinerter Quantoren in Körpertheorien. (English, Russian and French summaries) (82j:03032)

Macintyre, Angus See Cherlin, Gregory; et al., (82g:03057)

Mekler, Alan H. See Eklöf, Paul C., (82f:03033)

Metakides, G. (with Nerode, Anil) Effective content of field theory. (82b:03082)

Nerode, Anil See Metakides, G., (82b:03082)

Tucker, J. V. Computability and the algebra of fields: some affine constructions. (82c:03027)

12L10 Ultraproducts

12L15 Nonstandard arithmetic [See also 03H15.]

secondary classifications:

Delon, Françoise Hensel fields in equal characteristic $p > 0$. (82g:03058)

Ghiță, Alexandru A class of fields of hyperreal numbers. (82m:03073)

Macintyre, Angus Nonstandard number theory. (82b:03071)

12L99 None of the above, but in this section

Hickman, John L. Some observations concerning medial fields. 82c:12037

secondary classifications:

Basarab, Șerban A. Model-theoretic methods in the theory of Henselian-valued fields. (Romanian. English summary) (82c:12034)

Model-theoretic methods in the theory of Henselian-valued fields. II. (Romanian. English summary) (82c:12035)

- Extension of places and contraction properties for function fields over p -adically closed fields. (82j:03040)
- Cherlin, Gregory (with Shelah, Saharon) Superstable fields and groups. (82c:03045)
- Delon, Françoise Types sur $C(X)$. (82i:03044)
- van den Dries, Lou Quantifier elimination for linear formulas over ordered and valued fields. (82k:03035)
- Epstein, H. I. A natural structure theorem for complex fields. (82i:12025)
- Eriov, Ju. L. Regularly closed fields. (Russian) (82g:03050)
- Eliminability of quantifiers in regularly closed fields. (Russian) (82k:03036)
- Shelah, Saharon See Cherlin, Gregory, (82c:03045)

13-XX COMMUTATIVE RINGS AND ALGEBRAS (For the noncommutative case, see 16-XX.)

13-01 Elementary exposition, textbooks

secondary classifications:

- Connell, Ian ★Modern algebra. (82m:00001)
- Northcott, D. G. ★A first course of homological algebra. (82k:18001)

13-02 Advanced exposition (research surveys, monographs, etc.)

- Brauer, Richard Symmetrische Funktionen. Invarianten von linearen Gruppen endlicher Ordnung. 82i:13001
- Brewer, James W. ★Power series over commutative rings. 82i:13002
- Matsumura, Hideyuki ★Commutative algebra. 82i:13003
- Ratlift, L. J., Jr. A brief history and survey of the catenary chain conjectures. 82i:13004

secondary classifications:

- Roberts, Paul ★Homological invariants of modules over commutative rings. (82j:13020)

13-03 Historical (must also be assigned at least one classification number from Section 01)

13-04 Explicit machine computation and programs (not the theory of computation or programming)

13-06 Proceedings, conferences, etc.

- Algebraic geometry ★Applications of commutative rings to algebraic geometry. 82d:13001

- Applications of commutative rings to algebraic geometry ★Applications of commutative rings to algebraic geometry. 82d:13001

Colloquium:

- Algebra ★Colloque d'Algèbre. (French) [Algebra Colloquium] 82m:13001

- Commutative rings ★Applications of commutative rings to algebraic geometry. 82d:13001

- Rennes ★Colloque d'Algèbre. (French) [Algebra Colloquium] 82m:13001

Symposium:

- Applications of Commutative Rings to Algebraic Geometry ★Applications of commutative rings to algebraic geometry. 82d:13001

secondary classifications:

- (Eisenbud, David) See Seminar: Eisenbud, D.-Singh, B.-Vogel, W., (82b:14001)
- (Singh, Balwant) See Seminar: Eisenbud, D.-Singh, B.-Vogel, W., (82b:14001)
- (Vogel, Wolfgang) See Seminar: Eisenbud, D.-Singh, B.-Vogel, W., (82b:14001)
- Seminar:

- Eisenbud, D.-Singh, B.-Vogel, W. ★Seminar D. Eisenbud / B. Singh / W. Vogel. Vol. I. (82b:14001)

13Axx General commutative ring theory

13A05 Divisibility

- Močkoř, Jiří On \mathfrak{o} -ideals of groups of divisibility. 82m:13002

13A10 Radical theory

secondary classifications:

- Orecchia, Ferruccio Algebraic curves with ordinary points. (See 82m:14015)

13A15 Ideals

- Anderson, D. D. Radical ideals of principal class. 82j:13001
- Anderson, David F. (with Ohm, Jack) Valuations and semivaluations of graded domains. 82m:13003
- Bouvier, Alain (with Contessa, M.; Ribenboim, Paulo) Prime ideals in polynomial rings. 82c:13001
- Chang, C. N. (with Su, J. C.) A theorem on Poincaré algebras. 82e:13001
- Contessa, M. See Bouvier, Alain; et al., 82c:13001
- Dale, Louis Generalized ascending chains with an application to Hilbert's theorem. 82m:13002
- Dobbs, David E. On INC-extensions and polynomials with unit content. 82k:13001
- Ohm, Jack See Anderson, David F., 82m:13003
- Picavet, Gabriel Ultrafiltres sur un espace spectral—anneaux de Baer—anneaux à

spectre minimal compact. 82c:13003

- Ratlift, L. J., Jr. Maximal chains of prime ideals in integral extension domains. III. 82j:13001

- Ribenboim, Paulo See Bouvier, Alain; et al., 82c:13001

- Su, J. C. See Chang, C. N., 82e:13001

- Vecchio, Giuseppe On certain integers associated to an ideal and questions of complete intersection. (Italian) 82g:13002

secondary classifications:

- Fontana, Marco Quelques nouveaux résultats sur une classe d'espaces spectraux. (Italian summary) 82j:06024
- Mason, Gordon Prime \mathfrak{z} -ideals of $C(X)$ and related rings. (82c:54013)
- Ratlift, L. J., Jr. Independent elements, integrally closed ideals, and quasi-unmixedness. (82m:13006)
- Ursianu, Radu On a property of the finite extensions of the Laskerian rings. (Romanian summary) 82m:13009

13A17 Prime and primary ideals and their generalizations

- Anderson, D. D. Noetherian rings in which every ideal is a product of primary ideals. 82c:13002
- Anderson, David F. (with Dobbs, David E.) Pairs of rings with the same prime ideals. 82k:13002
- Bouvier, Alain (with Fontana, Marco) Une classe d'espaces spectraux de dimension ≤ 1 : les espaces principaux. (English summary) 82h:13001
- (with Contessa, M.; Ribenboim, Paulo) On chains of prime ideals in polynomial rings. 82g:13003
- Contessa, M. On some properties of PM-rings and MP-rings. 82m:13004
- See also Bouvier, Alain; et al., 82g:13003
- Dobbs, David E. See Anderson, David F., 82k:13002
- Fontana, Marco On some problems relating to spectral sets. (Italian. English summary) 82i:13001
- See also Bouvier, Alain, 82h:13001

- Heitmann, Raymond C. (with McAdam, Stephen) Good chains with bad contractions. 82d:13002

- Henriksen, Melvin Some sufficient conditions for the Jacobson radical of a commutative ring with identity to contain a prime ideal. 82c:13004

- Huneke, Craig Powers of ideals generated by weak d -sequences. 82k:13003

- Kim, Jeong Kook On the prime and primary ideals. (Korean summary) 82j:13002

- Matsumura, Hideyuki (with Ogoma, Tetsushi) Remarks on associated prime ideals. 82k:13004

- McAdam, Stephen See Heitmann, Raymond C., 82d:13002

- Ogoma, Tetsushi See Matsumura, Hideyuki, 82k:13004

- Ratlift, L. J., Jr. Integrally closed ideals and asymptotic prime divisors. 82i:13005
- Note on asymptotic prime divisors, analytic spreads and the altitude formula. 82j:13001

- Ribenboim, Paulo See Bouvier, Alain; et al., 82c:13003

- Vaughan, Nick H. Relations between classes of ideals in a domain. IV. 82d:13003

secondary classifications:

- Brownawell, W. Dale On the orders of zero of certain functions. (82k:10038)
- Masser, David W. On polynomials and exponential polynomials in several complex variables. (82j:10062)
- McAdam, Stephen Asymptotic prime divisors and going down. (82k:13019)

13A18 Valuations and their generalizations

secondary classifications:

- Arnold, Jimmy T. Power series rings over discrete valuation rings. (82k:13020)
- Močkoř, Jiří On \mathfrak{o} -ideals of groups of divisibility. (82m:13002)
- Vaughan, Nick H. Relations between classes of ideals in a domain. IV. (82d:13003)

13A20 Brauer groups [See also 12Gxx, 16A16.]

- Ford, T. J. Every finite abelian group is the Brauer group of a ring. 82j:13003
- Hürlimann, W. Sur le groupe de Brauer d'un anneau de polynômes en caractéristique p et la théorie des invariants. 82k:13005
- van Oystaeyen, F. Graded Azumaya algebras and Brauer groups. 82d:13004

secondary classifications:

- Fein, Burton (with Schacher, Murray) Brauer groups of rational function fields over global fields. (82h:12025)
- Lee, Heisook Birational invariance of cohomological Brauer group. (82j:14016)
- Azumaya algebras of a complex analytic space. (82m:32009)
- Saltman, David J. The Brauer group is torsion. (82c:16005)
- Schacher, Murray See Fein, Burton, (82h:12025)
- Takeuchi, Mitsuhiro $\text{Ext}_{\text{ad}}(\text{Sp } R, \mu^4) \simeq \text{Br}(A/k)$. (82c:16010)

13A99 None of the above, but in this section

- Harinath, K. S. (with Kamalamma, K. N.) Some elementary results in ring theory. II. 82j:13004
- Kamalamma, K. N. See Harinath, K. S., 82j:13004
- Olivier, Jean-Pierre L'anneau absolument plat universel, les épimorphismes et les parties constructibles. 82c:13003
- Simmons, Harry Reticulated rings. 82d:13005

secondary classifications:

- Crivei, I. On a class of rings. (Romanian. English summary) (82j:13011)

13Bxx Ring extensions and related topics

13B02 Extension theory

- Dobbs, David E. Lying-over pairs of commutative rings. **82k:13002**
 Gilmer, Robert (with Heinzer, William J.) Some countability conditions on commutative ring extensions. **82c:13005**
 Heinzer, William J. An essential integral domain with a nonessential localization. **82k:13006**
See also Gilmer, Robert, **82c:13005**
 Itoh, Shiroh Z-transforms and overrings of a Noetherian ring. **82d:13007**

secondary classifications:

- Anderson, David F. (with Dobbs, David E.) Pairs of rings with the same prime ideals. **(82k:13002)**
 Dobbs, David E. *See* Anderson, David F., **(82k:13002)**
 Huckaba, James A. (with Papick, Ira J.) Remarks on module-finite pairs. **(82k:13018)**
 Papick, Ira J. *See* Huckaba, James A., **(82k:13018)**

13B05 Galois theory

- Haggenmüller, Rudolf Diskriminanten von Galoisweiterungen kommutativer Ringe. **82j:13004**
 Harrison, D. K. Nonnormal Galois theories and some resulting structures. **82m:13005**
 Merkur'ev, A. S. Projective modules over rings of invariants. (Russian) **82k:13003**
 Northcott, D. G. Topological groups and integral extensions. **82c:13006**

13B10 Automorphisms and derivations

- Castillon, J. B. (with Micali, Artibano) A -endomorphismes de $A(X)$. (English summary) **82j:13007**
 Fogarty, John Kähler differentials and Hilbert's fourteenth problem for finite groups. **82c:13006**
 Furuya, Mamoru On Noetherian rings with integrable derivations and p -basis. **82c:13007**
 Kim, Joong-Ho R -automorphisms of $R[[X_1, \dots, X_n]]$. **82j:13005**
 Micali, Artibano *See* Castillon, J. B., **82k:13007**
 Seibt, Peter Differential criteria on the permissibility of a blowing-up. **82c:13004**
 Vorst, Ton The general linear group of polynomial rings over regular rings. **82c:13008**
 Wang, Stuart Sui Sheng Extension of derivations. **82c:13005**

secondary classifications:

- Brown, William C. (with Glaz, Sarah) Some counterexamples concerning a differential criterion for flatness. **(82c:13014)**
 Fried, M. A note on automorphism groups of algebraic number fields. **(82c:12008)**
 Furuya, Mamoru Note on local rings with integrable derivations. **(82m:13012)**
 Glaz, Sarah *See* Brown, William C., **(82c:13014)**
 Platte, Erich Pure descent for the module of Zariski differentials. **(82c:14008)**
 Scheja, Günter (with Wiebe, Hartmut) Zur Chevalley-Zerlegung von Derivationen. (English summary) **(82d:13008)**
 Wiebe, Hartmut *See* Scheja, Günter, **(82d:13008)**
 Yamauchi, Norio On algebra with universal finite module of differentials. **(82m:13007)**

13B15 Ramification theory

13B20 Integral dependence; integral closure; integrally closed rings, related rings (Japanese, etc.)

- Akiba, Tomoharu On the normality of $R(X)$. **82b:13002**
 Integrally-closedness of polynomial rings. **82c:13007**
 Anderson, David F. Seminormal graded rings. **82b:13004**
 Brodmann, Markus (with Rothaus, Christel) Über den regulären Ort in ausgezeichneten Ringen. **82d:13009**
 Greither, Cornelius Seminormality, projective algebras, and invertible algebras. **82b:13005**
 Huckaba, James A. (with Keller, James M.) The integral closure of a graded ring. **82j:13006**
 Keller, James M. *See* Huckaba, James A., **82j:13006**
 Lazarus, Michel Fermeture intégrale et changement de base. [Integral closure and base change] **(See 82m:13001)**
 Nishimura, Jun-ichi On ideal transforms of Noetherian rings. II. **82g:13005**
 Pettit, M. Edward, Jr. Properties of H_f -rings. **82c:13009**
 Revoy, Philippe Groupes d'automorphismes d'algèbres graduées. (English summary) **82c:13010**
 Rothaus, Christel *See* Brodmann, Markus, **82d:13009**

secondary classifications:

- Arnold, Jimmy T. (with Boyd, David W.) Transcendence degree in power series rings. **(82k:13024)**
 Boyd, David W. *See* Arnold, Jimmy T., **(82k:13024)**
 Dayton, Barry H. Seminormality implies the Chinese remainder theorem. **(82m:13014a)**
 (with Roberts, Leslie G.) Seminormality of unions of planes. **(82m:13014b)**
 Seminormality and the Chinese remainder theorem. **(See 82m:14015)**
 Dobbs, David E. Lying-over pairs of commutative rings. **(82b:13002)**
 Heitmann, Raymond C. (with McAdam, Stephen) Good chains with bad contractions. **(82d:13002)**
 McAdam, Stephen Asymptotic prime divisors and going down. **(82k:13019)**
See also Heitmann, Raymond C., **(82d:13002)**

- Nakajima, Haruhisa Modular representations of p -groups with regular rings of invariants. **(82a:20016)**
 Northcott, D. G. Topological groups and integral extensions. **(82c:13006)**
 Roberts, Leslie G. *See* Dayton, Barry H., **(82m:13014b)**
 Wagner, Ascher Invariants of groups generated by reflections or transvections. **(82j:20087)**

13B25 Polynomials over commutative rings

- Jacob, Bill A nullstellensatz for $R((t))$. **82c:13006**
 Jacob, Genevieve Anneau de fonctions polynômes d'un anneau commutatif unitaire. **82j:13007**
 Matsuda, Ryūki Kronecker function rings. **82c:13008**
 Miyazaki, Masayoshi Regular subrings of a polynomial ring. **82b:13003**
 Moh, T. T. On the concept of approximate roots for algebra. **82b:13004**
 Saltzberg, Pablo M. The minimal generating space of a polynomial. **82b:13005**
 Swan, Richard G. On seminormality. **82d:13006**
 Trinks, Wolfgang Über B. Buchbergers Verfahren, Systeme algebraischer Gleichungen zu lösen. (English summary) **82c:13007**
 Yoshida, Ken-ichi On the coefficient ring of a torus extension. **82c:13008**

secondary classifications:

- Brewer, James W. (with Heinzer, William J.) R Noetherian implies $R(X)$ is a Hilbert ring. **(82d:13010)**
 Estes, Dennis R. (with Matijevic, Jacob R.) Local-global criteria for outer product rings. **(82c:13024)**
 Heinzer, William J. *See* Brewer, James W., **(82d:13010)**
 Huckaba, James A. (with Papick, Ira J.) A localization of $R[x]$. **(82g:13006)**
 Lequain, Yves (with Simis, Aron) Projective modules over $R[X_1, \dots, X_n]$, R a Prüfer domain. **(82c:13010)**
 Matijevic, Jacob R. *See* Estes, Dennis R., **(82c:13024)**
 McDonald, B. R. (with Waterhouse, William C.) Projective modules over rings with many units. **(82j:13010)**
 Papick, Ira J. *See* Huckaba, James A., **(82g:13006)**
 le Riche, L. R. The ring $R(X)$. **(82d:13011)**
 Simis, Aron *See* Lequain, Yves, **(82c:13010)**
 Waterhouse, William C. *See* McDonald, B. R., **(82j:13010)**

13B30 Quotients and localization

- Brewer, James W. (with Heinzer, William J.) R Noetherian implies $R(X)$ is a Hilbert ring. **82d:13010**
 Heinzer, William J. *See* Brewer, James W., **82d:13010**
 Huckaba, James A. (with Papick, Ira J.) A localization of $R[x]$. **82g:13006**
 Marot, Jena Conservation des propriétés des fibres formelles d'un anneau semi-local noethérien par complétion adique. [Preservation of the properties of the formal fibers of a Noetherian semilocal ring under adic completion] **(See 82m:13001)**
 Papick, Ira J. *See* Huckaba, James A., **82g:13006**
 Radu, N. Sur la structure des algèbres locales noethériennes formellement lisses. **82g:13007**
 le Riche, L. R. The ring $R(X)$. **82d:13011**

secondary classifications:

- Fraga, Robert J. (with Park, Young L.) On hyper-real rings of quotients. (Arabic summary) **(82c:54034)**
 Gilmer, Robert (with Heinzer, William J.) The quotient field of an intersection of integral domains. **(82j:13017)**
 Heinzer, William J. An essential integral domain with a nonessential localization. **(82k:13006)**
See also Gilmer, Robert, **(82j:13017)**
 Park, Young L. *See* Fraga, Robert J., **(82c:54034)**

13B99 None of the above, but in this section

- Nagano, Yoshihiko Some remarks on going-between rings. (Japanese summary) **82i:13009**
 Papick, Ira J. Coherent pairs. (Italian summary) **82i:13010**

secondary classifications:

- Atkins, D. L. (with Brewer, James W.) D -automorphisms of power series rings and the continuous radical of D . **(82j:13022)**
 Brewer, James W. *See* Atkins, D. L., **(82j:13022)**
 Eakin, Paul (with Sathaye, Avinash) R -automorphisms of finite order in $R[[X]]$. **(82j:13023)**
 Hattori, Akira On Amitsur cohomology of rings of algebraic integers. **(82b:12012)**
 Sathaye, Avinash *See* Eakin, Paul, **(82j:13023)**

13Cxx Theory of modules and ideals

13C05 Structure, classification theorems

- Barnard, A. D. Multiplication modules. **82k:13008**
 Brandal, Willy Conditions for being an FGC domain. **82k:13009**
 Bruns, Winfried (with Evans, E. Graham, Jr.; Griffith, Phillip A.) Syzygies, ideals of height two, and vector bundles. **82c:13009**
 The Eisenbud-Evans generalized principal ideal theorem and determinantal ideals. **82k:13010**
 Crivel, I. R -modules with essential maximal submodules. (Romanian. English summary) **82k:13011**

- Evans, E. Graham, Jr. See Bruns, Winfried; et al., 82c:13009
 Griffith, Phillip A. See Bruns, Winfried; et al., 82c:13009
 Lady, E. L. Extension of scalars for torsion free modules over Dedekind domains. 82c:13011
 Singh, Surjeet Dual continuous modules over Dedekind domains. (Arabic summary) 82c:13011
 Stanton, Robert O. Decompositions of modules over a discrete valuation ring. 82c:13012
 Szeo, George On projective modules over a central quotient ring. 82j:13008
 Zöschinger, Helmut Komplemente für zyklische Moduln über Dedekindringen. 82c:13012

secondary classifications:

- Andrade, José F. (with Simis, Aron; Vasconcelos, Wolmer V.) On the grade of some ideals. (82j:13015)
 Avramov, Luchezar L. Obstructions to the existence of multiplicative structures on minimal free resolutions. (82m:13011)
 Matlis, Eben The ring as a torsion-free cover. (82c:13011)
 Midgård, Bette (with Wiegand, Sylvia) Commutative rings of bounded module type. (82c:13020)
 Ohm, Jack Space curves as ideal-theoretic complete intersections. (82f:14051)
 Simis, Aron See Andrade, José F.; et al., (82j:13015)
 Stafford, J. T. Generating modules efficiently: algebraic K -theory for noncommutative Noetherian rings. (82k:16018)
 Vasconcelos, Wolmer V. See Andrade, José F.; et al., (82j:13015)
 Wiegand, Sylvia See Midgård, Bette, (82c:13020)

13C10 Projective and free modules and ideals [See also 18G05.]

- Gupta, Surender K. (with Murthy, M. Pavaman) ★Suslin's work on linear groups over polynomial rings and Serre problem. 82j:13009
 Kang, Ming Chang Projective modules over some rings of invariants. 82h:13006
 Kotlarsky, Mark On Plücker [Plücker] properties of commutative rings. 82c:13013
 Landsburg, Steven E. Patching theorems for projective modules. 82h:13006
 Lequain, Yves (with Simis, Aron) Projective modules over $R[X_1, \dots, X_n]$, R a Prüfer domain. 82c:13010
 Lindel, Hartmut Erweiterungskriterien für stabil freie Moduln über Polynomringen. 82h:13007
 McDonald, B. R. (with Waterhouse, William C.) Projective modules over rings with many units. 82j:13010
 Murthy, M. Pavaman See Gupta, Surender K., 82j:13009
 Raman, Parimala (with Sridharan, R.) Quadratic forms over rings of dimension 1. 82c:13012
 Simis, Aron See Lequain, Yves, 82c:13010
 Sridharan, R. See Raman, Parimala, 82c:13012
 Waterhouse, William C. See McDonald, B. R., 82j:13010

secondary classifications:

- Boratyński, Maksymilian Representing subschemes as schemes of zeros of a section of a vector bundle. (82c:14061)
 Davison, T. M. K. On Gleason's definition of quadratic forms. (82h:15030)
 Haghighi, A. Correction to: "Reflexive modules over certain differential polynomial rings" [Proc. Amer. Math. Soc. 73 (1979), no. 3, 313–318; MR 80c:16002]. (82c:16012)
 Merkur'ev, A. S. Projective modules over rings of invariants. (Russian) (82h:13003)
 Nakajima, Haruhisa Invariants of finite abelian groups generated by transvections. (82c:14058)
 Revo, Philippe Remarques sur la forme trace. [Remarks on the trace form] (82k:10023)

13C11 Injective and flat modules and ideals [See also 18G05.]

- Brown, William C. (with Glaz, Sarah) Some counterexamples concerning a differential criterion for flatness. 82c:13014
 Dade, Everett C. Localization of injective modules. 82c:13013
 Glaz, Sarah A differential characterization of flat ideals in rings of characteristic $p > 0$. 82j:13008
 See also Brown, William C., 82c:13014

secondary classifications:

- Herzog, Bernd Die Wirkung lokaler Homomorphismen auf die Hilbertfunktion. (82f:13024)
 Raimondo, Mario On the global ring of Nash functions. (Italian summary) (82f:13013)

13C12 Torsion modules and ideals

- Matlis, Eben The ring as a torsion-free cover. 82c:13011

13C13 Other special types

- Barnard, A. D. Distributive extensions of modules. 82j:13009
 Crivei, I. On a class of rings. (Romanian. English summary) 82j:13011
 De Munter-Kuyt, Lucie On torsion-free modules of finite rank over a Dedekind domain. 82c:13014
 Rees, David Rings associated with ideals and analytic spread. 82f:13002

secondary classifications:

- Barnard, A. D. Multiplication modules. (82k:13008)
 Jouanolou, J. P. Idéaux résultants. (82c:14038)

13C15 Dimension theory, depth, related rings (catenary, etc.)

- Alfonsi, Bernard Grade non-noethérien. 82j:13012
 Aoyama, Yôichi On the depth and the projective dimension of the canonical module. 82c:13007
 De Stefano, Stefania (with Guidetti, Renato) On a property of regular rings. (Italian. English summary) 82j:13013
 Ellingsrud, Geir (with Skjelbred, Tor) Profondeur d'anneaux d'invariants en caractéristique p . 82c:13015
 Giral, José M. Krull dimension, transcendence degree and subalgebras of finitely generated algebras. 82h:13008
 Guidetti, Renato See De Stefano, Stefania, 82j:13013
 Magid, Andy R. Dimension in rings with solvable algebraic group action. 82c:13015
 Ngô Việt Trung A class of imperfect prime ideals having the equality of ordinary and symbolic powers. 82c:13013
 A characterization of two-dimensional unmixed local rings. 82d:13012
 Ratliff, L. J., Jr. Independent elements, integrally closed ideals, and quasi-unmixedness. 82m:13006
 Sakaguchi, Michinori Generalized Cohen-Macaulay modules. 82h:13008
 Simis, Aron (with Vasconcelos, Wolmer V.) The syzygies of the conormal module. 82c:13016
 (with Vasconcelos, Wolmer V.) On the dimension and integrality of symmetric algebras. 82i:13017
 Skjelbred, Tor See Ellingsrud, Geir, 82c:13015
 Vasconcelos, Wolmer V. See Simis, Aron, 82c:13016 and 82c:13017
 Yamauchi, Norio On algebra with universal finite module of differentials. 82m:13007

secondary classifications:

- Bruns, Winfried The Eisenbud-Evans generalized principal ideal theorem and determinantal ideals. (82k:13010)
 Pettit, M. Edward, Jr. Properties of H -rings. (82c:13009)
 White, Neil L. The transcendence degree of a coordinatization of a combinatorial geometry. (82c:05054)

13C99 None of the above, but in this section

- Achilles, Rüdiger (with Schenzel, Peter; Vogel, Wolfgang) Bemerkungen über normale Flachheit und normale Torsionsfreiheit und Anwendungen. 82c:13018
 Beidar, K. I. Modules over commutative semiprime rings. (Russian) 82c:13019
 Bijan-Zadeh, M. H. A common generalization of local cohomology theories. 82c:13012
 Hanna, C. C. Basic elements in graded rings. 82h:13009
 Kiyek, Karl-Heinz Anwendung von Ideal-Transformationen. (English summary) 82m:13008
 Prószyński, A. m -applications over finite fields. 82k:13014
 Schenzel, Peter See Achilles, Rüdiger; et al., 82c:13018
 Ursianu, Radu On a property of the finite extensions of the Laskerian rings. (Romanian summary) 82m:13009
 Vogel, Wolfgang See Achilles, Rüdiger; et al., 82c:13018

secondary classifications:

- Donskoi, D. E. The structure of maximal ideals in ordered rings. (Russian) (82i:46009)
 Gusev, A. I. The structure of ideals in ordered rings. (Russian) (82i:46010)
 Huneke, Craig Powers of ideals generated by weak d -sequences. (82k:13003)
 Itoh, Shiroh Z -transforms and overrings of a Noetherian ring. (82d:13007)
 Kautschitsch, Hermann (with Müller, Winfried B.) Ideale in Kompositionsringen formaler Potenzreihen mit nilpotenten Anfangskoeffizienten. (82m:13018)
 Müller, Winfried B. See Kautschitsch, Hermann, (82m:13018)

13Dxx Homological methods

13D03 Cohomology of commutative rings and algebras

- André, Michel Produits de Massey et $(2p+1)$ èmes déviations. 82c:13016
 Faltings, Gerd Der Endlichkeitssatz in der lokalen Kohomologie. 82f:13003
 Fiorentini, Mario Relative regular sequences and syzygetic ideals. (Italian. French summary) 82j:13014
 Sharp, R. Y. On the attached prime ideals of certain Artinian local cohomology modules. 82c:13015

secondary classifications:

- Jouanolou, J. P. Idéaux résultants. (82c:14038)
 Kosaki, Kôtarô On the acyclicity of Witt ring functor. (82c:10036)
 Lorenzani, Massimo (with Maschietti, Antonio) Algebraic and analytic local cohomology for affine schemes. (Italian summary) (82k:14006)
 Maschietti, Antonio See Lorenzani, Massimo, (82k:14006)
 Rahbar-Rohandel, Hamid Sur la série de Poincaré de certains anneaux locaux noethériens. (English summary) (82c:13020)

13D05 Homological dimension

- Andrade, José F. (with Simis, Aron; Vasconcelos, Wolmer V.) On the grade of some ideals. 82j:13015
 Dutton, P. The distance of a prime ideal from a module. 82j:13016
 Foxby, Hans-Bjørn Homological dimensions of complexes of modules. 82a:13001
 Simis, Aron See Andrade, José F.; et al., 82j:13015
 Vasconcelos, Wolmer V. See Andrade, José F.; et al., 82j:13015

secondary classifications:

- Alfonsi, Bernard Grade non-noethérien. (82j:13012)

- Fel'dman, G. L. Global dimension of rings of differential operators. (Russian) (82h:16023)
 Hattori, Akira Some arithmetical applications of groups $H^q(R, G)$. (82g:12009)
 Wehlen, Joseph A. Hochschild dimension and the prime radical of algebras. (82j:16044)

13D10 Deformations and infinitesimal methods [See also 14D15, 16A58, 32Gxx.]

- Gulliksen, Tor H. On the Hilbert series of the homology of differential graded algebras. 82c:13017
 Kleppe, Jan O. Deformations of graded algebras. 82j:13017
 Ulrich, Bernd Torsion des Differentialmoduls und Kotangentenmodul von Kurvensingularitäten. [Torsion of the differential module and cotangent module of curve singularities] 82j:13018

secondary classifications:

- Almkvist, Gert Reciprocity theorems for representations in characteristic p . (82g:20020)

13D15 Grothendieck group, K -theory [See also 14F15, 18F25, 18F30.]

- Allard, Jacques (with Lam, Kee Yuen) Freeness of orthogonal modules. 82j:13019
 Carral, M. K -theory of Gelfand rings. 82f:13004
 Chaladus, Stefan Lower bounds of the order of $K_2(\mathbb{Z}G)$ for a cyclic p -group G . (Russian summary) 82c:13013
 Fossum, Robert M. A characteristic class in algebraic K -theory. (See 82m:13001)
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- Almkvist, Gert Erratum: " K -theory of endomorphisms" [J. Algebra 55 (1978), no. 2, 308–340; MR 80i:18018]. (82h:18008)
 Geller, Susan C. (with Roberts, Leslie G.) Kahler differentials and excision for curves. (82d:14012)
 Haršiladze, A. F. Construction of a complement in Hermitian K -theory. (Russian) (82d:18012a)
 Hermitian K -theory and quadratic extensions of rings. (Russian) (82d:18012b)
 Lindel, Hartmut Erweiterungskriterien für stabil freie Moduln über Polynomringen. (82h:13007)
 Loday, Jean-Louis On the boundary map $K_2(\Lambda/I) \rightarrow K_2(\Lambda, I)$. (82h:18009b)
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 Soule, Christophe K -théorie et correspondances algébriques. (English summary) (82c:14012)
 Vorst, Ton The general linear group of polynomial rings over regular rings. (82c:13008)
 Weibel, Charles A. K_2 , K_3 and nilpotent ideals. (82i:18016)
 Mayer-Vietoris sequences and module structures on NK_* . (82k:18010)
 A survey of products in algebraic K -theory. (82k:18011)

13D25 Complexes [See also 14Mxx.]

- Akin, Kaan (with Buchsbaum, David A.; Weyman, Jerzy) Resolutions of determinantal ideals: the submaximal minors. 82h:13011
 Andrade, José F. (with Simis, Aron) A complex that resolves the ideal of minors having $n-1$ columns in common. 82c:13020
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 Weyman, Jerzy See Akin, Kaan; et al., 82h:13011

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- De Concini, Corrado (with Strickland, Elisabetta) On the variety of complexes. (82m:14032)
 Foxby, Hans-Björn Homological dimensions of complexes of modules. (82a:13001)
 Massaza, Carla (with Ragusa, Alfio) On some conditions of regularity, in terms of existence of a good basis of syzygies. (82k:13023)

- Ragusa, Alfio See Massaza, Carla, (82k:13023)
 Roberts, Paul Cohen-Macaulay complexes and an analytic proof of the new intersection conjecture. (82e:14009)
 Simis, Aron (with Vasconcelos, Wolmer V.) The syzygies of the conormal module. (82i:13016)
 (with Vasconcelos, Wolmer V.) On the dimension and integrality of symmetric algebras. (82i:13017)
 Strickland, Elisabetta See De Concini, Corrado, (82m:14032)
 Ulrich, Bernd Torsion des Differentialmoduls und Kotangentenmodul von Kurvensingularitäten. [Torsion of the differential module and cotangent module of curve singularities] (82j:13018)
 Vasconcelos, Wolmer V. See Simis, Aron, (82i:13016) and (82i:13017)

13D30 Torsion theory [See also 13C12, 16A63, 18E40.]

13D99 None of the above, but in this section

- Avramov, Luchezar L. Obstructions to the existence of multiplicative structures on minimal free resolutions. 82m:13011
 Gulliksen, Tor H. On the deviations of a local ring. 82c:13022
 Platte, Erich Zur endlichen homologischen Dimension von Differentialmoduln. (English summary) 82d:13015

secondary classifications:

- Levin, Gerson Large homomorphisms of local rings. (82c:13034)
 Sally, Judith D. The Poincaré series of stretched Cohen-Macaulay rings. (82h:13011)
 Schiemann, Günther Die Homologiegruppen singularitätenfreier algebraischer Hyperflächen. (82a:14005)

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 Huckaba, James A. (with Papick, Ira J.) Remarks on module-finite pairs. 82k:13018
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 McAdam, Stephen Asymptotic prime divisors and going down. 82k:13019
 Papick, Ira J. See Huckaba, James A., 82k:13018
 Rothaus, Christel Zur Kompletierung ausgezeichneter Ringe. 82c:13023

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- Bouvier, Alain (with Contessa, M.; Ribenboim, Paulo) On chains of prime ideals in polynomial rings. (82g:13003)
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 Dale, Louis Generalized ascending chains with an application to Hilbert's theorem. (82c:13002)
 Damiano, Robert F. (with Papp, Zoltán) On consequences of stability. (82h:16032)
 Giral, José M. Krull dimension, transcendence degree and subalgebras of finitely generated algebras. (82h:13008)
 Papp, Zoltán See Damiano, Robert F., (82h:16032)
 Raimondo, Mario On the global ring of Nash functions. (Italian summary) (82f:32013)
 Ratliff, L. J., Jr. Integrally closed ideals and asymptotic prime divisors. (82i:13005)
 A brief history and survey of the catenary chain conjectures. (82k:13004)
 Note on asymptotic prime divisors, analytic spreads and the altitude formula. (82h:13001)
 Rees, David Rings associated with ideals and analytic spread. (82f:13002)
 Ribenboim, Paulo See Bouvier, Alain; et al., (82g:13003)
 Sharp, R. Y. Cohen-Macaulay properties for balanced big Cohen-Macaulay modules. (82h:13017)

13E10 Artinian rings and modules, finite-dimensional algebras

- Ayoub, Christine W. On certain chain rings and their groups of units. 82g:13012

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- Klyuk, Karl-Heinz Anwendung von Ideal-Transformationen. (English summary) (82m:13008)

13E15 Rings and modules of finite generation or representation

- Nicolas, Anne-Marie Généralisation d'un critère de Pontryagin concernant les groupes sans torsion dénombrables à des modules sans torsion sur des anneaux de Dedekind. Conditions de rang, de type, de chaînes ascendantes. 82e:13016

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- Eisenbud, David Introduction to algebras with straightening laws. (82i:14030)

13E99 None of the above, but in this section

- Al-Daffa', Ali A. See Yahya, S. M., 82d:13017
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secondary classifications:

- Anderson, D. D. Radical ideals of principal class. (82j:13001)

- Fogarty, John Kähler differentials and Hilbert's fourteenth problem for finite groups. (82c:13006)
 Vorst, Ton The general linear group of polynomial rings over regular rings. (82c:13008)

13Fxx Arithmetic rings [See also 12--XX.]

13F05 Dedekind and Prüfer rings and their generalizations

- Anderson, D. D. Some remarks on multiplication ideals. 82d:13018
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- Barnard, A. D. Distributive extensions of modules. (82g:13009)
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 Bühler, J. P. A note on tamely ramified polynomials. (82c:13017)
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 Hardy, Bonnie R. (with Shores, Thomas S.) Arithmetical semigroup rings. (82d:13019)
 Jacob, Geneviève Anneau de fonctions polynômes d'un anneau commutatif unitaire. (82j:13007)
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- Rodosskii, K. A. Euclidean rings. (Russian) 82g:13014

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- Bouvier, Alain (with Fontana, Marco) Une classe d'espaces spectraux de dimension ≤ 1 : les espaces principaux. (English summary) (82h:13001)
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13F15 Factorial rings, unique factorization domains

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 Kennedy, Robert E. Krull rings. 82c:13019
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- van der Put, Marius The class group of a one-dimensional affinoid space. (82h:14018)
 Shiota, Masahiro Sur la factoriabilité de l'anneau des fonctions lisses rationnelles. (English summary) (82h:14009)

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- Campanella, Giulio Some results on the maximal ideals of polynomial rings. (Italian. English summary) 82j:13021
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- Dale, Louis Generalized ascending chains with an application to Hilbert's theorem. (82c:13002)
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 Kang, Ming Chang Picard groups of some rings of invariants. (82m:14004)
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13F25 Formal power series rings

- Arnold, Jimmy T. Power series rings over discrete valuation rings. 82k:13020
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 Brewer, James W. See Atkins, D. L., 82j:13022
 Eakin, Paul (with Sathaye, Avinash) R -automorphisms of finite order in $R[[X]]$. 82j:13023
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- Ismail, Mourad E. H. See Ibrag, Edwin C., 82b:13010
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secondary classifications:

- Brewer, James W. ★Power series over commutative rings. (82i:13002)
 Freeman, J. M. Pincherle's formula. (82b:05013)
 Rota, Gian-Carlo (with Sagan, Bruce; Stein, Paul R.) A cyclic derivative in noncommutative algebra. (82b:05017)
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13F30 Discrete valuation rings

- Benabdallah, Khalid (with Roggenkamp, K. W.) Pure unital local principal ideal domains in local fields. 82g:13016
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13F99 None of the above, but in this section

- Estes, Dennis R. (with Matijević, Jacob R.) Local-global criteria for outer product rings. 82c:13024
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- Anderson, David F. Integral \vee -ideals. (82j:13024)
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- Anderson, David F. Integral \vee -ideals. 82j:13024
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- Anderson, D. D. Some remarks on multiplication ideals. (82d:13018)
 Anderson, David F. (with Ohm, Jack) Valuations and semivaluations of graded domains. (82m:13003)
 Arnold, Jimmy T. Algebraic extensions of power series rings. (82k:13025)
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- Feigelstock, Shalom The additive groups of local rings. 82i:13021
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- Furuya, Mamoru On Noetherian rings with integrable derivations and p -basis. (82c:13007)
 Roberts, Leslie G. Some examples of smooth and regular rings. (82e:14008)

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- Adkins, William A. Seminormal surfaces. 82j:13025
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 Bod'á, Eduard On the problem of comparing dynamical and statistical multiplicities in the theory of ideals. (Slovak. Russian and German summaries) 82k:13014
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 Cavaliere, Maria Pia (with Niesi, Gianfranco) On Serre's conditions in the form ring of an ideal. 82m:13013
 Daep, U. (with Evans, A.) A note on Buchsbaum rings and localizations of graded domains. 82c:13026
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secondary classifications:

- Achilles, Rüdiger (with Vogel, Wolfgang) Über vollständige Durchschnitte in lokalen Ringen. (82a:14060)
 Bănică, Constantin (with Stoia, Manuela) Gorenstein points of a flat morphism of complex spaces. (82i:32032)
 Chang, C. N. (with Su, J. C.) A theorem on Poincaré algebras. (82c:13001)
 Edelman, Paul H. The Bruhat order of the symmetric group is lexicographically shellable. (82j:06004)
 Eisenbud, David Introduction to algebras with straightening laws. (82i:14030)
 Homological algebra on a complete intersection, with an application to group representations. (82d:13013)
 Faltings, Gerd Ein Kriterium für vollständige Durchschnitte. (82f:14050)
 Garsia, Adriano M. Combinatorial methods in the theory of Cohen-Macaulay rings. (82i:06002)
 Gulliksen, Tor H. On the deviations of a local ring. (82c:13022)
 Huneke, Craig On the symmetric algebra of a module. (82d:13016)
 The arithmetic perfection of Buchsbaum-Eisenbud varieties and generic modules of projective dimension two. (82c:13021)
 Johnson, Johnny A. Regular and Macaulay lattices. (82g:06027)
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 A characterization of two-dimensional unmixed local rings. (82d:13012)
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- Bărcănescu, Ș. (with Manolache, N.) Betti numbers of Segre-Veronese singularities. 82j:13029
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secondary classifications:

- Bresinsky, Henrik (with Renschuch, Bodo) Basisbestimmung Veronesischer Projektionsideale mit allgemeiner Nullstelle $(t_0^m, t_0^{m-1}t_1^m, t_0^{m-2}t_1^{m-1}t_2^m, \dots, t_0 t_1^{m-1} t_2^{m-1} \dots t_{m-1}^m)$. (82i:14032)
 Brown, William C. A differential characterization of multiplicity sequences over arbitrary fields. (82k:14017)
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13H99 None of the above, but in this section

- Gover, Eugene (with Salmon, Paolo) On a class of Golod homomorphisms. 82c:13033
 Huneke, Craig A characterization of locally Macaulay completions. 82m:13017
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- Massaza, Carla (with Ragusa, Alfio) On some conditions of regularity, in terms of existence of a good basis of syzygies. 82k:13023
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secondary classifications:

- Craven, Thomas C. Orderings of higher level and semilocal rings. (82h:10028)
 Laufer, Henry B. On generalized Weierstrass points and rings with no prime elements. (82m:32020)
 Löfwall, Clas (with Roos, Jan-Erik) Cohomologie des algèbres de Lie graduées et séries de Poincaré-Betti non rationnelles. (English summary) (82d:17003)
 Ngô Việt Trung Spezialisierungen allgemeiner Hyperflächenschnitte und Anwendungen. (82j:14005)
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 Schoeller, C. Homologie d'anneaux locaux de dimension d'immersion 3. [Homology of local rings of imbedding dimension 3] (82m:13010)
 Sharp, R. Y. On the attached prime ideals of certain Artinian local cohomology modules. (82k:13015)
 Stanton, Robert O. Decompositions of modules over a discrete valuation ring. (82k:13012)
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13Jxx Topological rings [See also 16A80.]

13J05 Power series rings

- Arnold, Jimmy T. (with Boyd, David W.) Transcendence degree in power series rings. 82k:13024
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secondary classifications:

- Becker, Joseph A. (with Lipshitz, Leonard) Remarks on the elementary theories of formal and convergent power series. (82i:14004a)
 (with Zame, William R.) Applications of functional analysis to the solution of power series equations. (82k:32029)
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 Bosch, Siegfried A rigid analytic version of M. Artin's theorem on analytic equations. (82k:32067)
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 Jensen, Christian U. Propriétés homologiques et logiques des anneaux de fonctions entières. (English summary) (82k:30057)
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13J10 Complete rings

- Denef, J. (with Lipshitz, Leonard) Ultraproducts and approximation in local rings. II. 82j:13021
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- Močkar, Jiri The completion of Prüfer rings. (82f:13006)
 Radu, N. Sur la structure des algèbres locales noethériennes formellement lisses. (82g:13007)
 Rotthaus, Christel Zur Komplettierung ausgezeichneter Ringe. (82c:13023)

13J15 Henselian rings

- Plonski, Arkadiusz Remarque sur le lemme de Hensel. (Russian summary) 82m:13020

secondary classifications:

- Estrada, Mario Einige Bemerkungen über Ringe mit Approximationseigenschaft. [Some comments on rings with the approximation property] (82m:14003)

13J20 Global topological rings

secondary classifications:

- Weber, Hans Zu einem Problem von H. J. Kowalsky. (82m:12019)

13J25 Ordered rings [See also 06F25, 16A86.]

13J99 None of the above, but in this section

Pfister, Gerhard (with Popescu, Dorin) Die Approximationseigenschaft von Primidealen. (English and Russian summaries) 82d:13022

Popescu, Dorin See Pfister, Gerhard, 82d:13022

secondary classifications:

Dăh Van Huynh Über linear kompakte Ringe. (82d:16036)

13K05 Witt vectors and related rings

secondary classifications:

Kanesaka, Kiyomi (with Sekiguchi, Koji) Representation of Witt vectors by formal power series and its applications. (82m:12015)

Sekiguchi, Koji See Kanesaka, Kiyomi, (82m:12015)

Weibel, Charles A. Mayer-Vietoris sequences and module structures on NK_* . (82k:18010)

13L05 Applications of logic to commutative algebra [See also 03Cxx, 03Hxx.]

Toffalori, Carlo Some observations on existentially closed commutative rings. (Italian. English summary) 82f:13008

secondary classifications:

Göbel, Rüdiger Darstellung von Ringen als Endomorphismenringe. (82f:16035)

Podewski, K.-P. (with Reincke, J.) On algebraically closed commutative indecomposable rings. (82c:03050)

Reincke, J. See Podewski, K.-P., (82c:03050)

Zeitler, Horst Die Amalgamierungseigenschaft und reine Ringe. (82j:03036)

13Mxx Finite commutative rings (For number-theoretic aspects, see 12Cxx.)

13M05 Structure

Britten, Daniel J. (with Lemire, F. W.) A structure theorem for rings supporting a discrete Fourier transform. 82m:13021

Lemire, F. W. See Britten, Daniel J., 82m:13021

secondary classifications:

Mollov, Todor Ž. (with Načev, Nako A.) Some set-theoretic properties of the Baer radical of commutative rings with prime characteristic. (Bulgarian. Russian and English summaries) (82k:16007)

Načev, Nako A. See Mollov, Todor Ž., (82k:16007)

13M10 Polynomials

Eigenthaler, Günther (with Müller, Winfried B.) A remark on polynomial functions over finite commutative rings with identity. 82i:13027

Müller, Winfried B. See Eigenthaler, Günther, 82i:13027

Nečev, A. A. Polynomial transformations of finite commutative local principal ideal rings. (Russian) 82b:13013

13M99 None of the above, but in this section

secondary classifications:

Mazzola, Guerino Generic finite schemes and Hochschild cocycles. (82k:14010)

Pol, A. (with Ventou, M.) Codes autoauxiliaires principaux et groupe d'automorphismes de l'algèbre $A = F_2[X_1, \dots, X_n] / (X_1^2 - 1, \dots, X_n^2 - 1)$. (English summary) (82i:94022)

Ventou, M. See Pol, A., (82i:94022)

13N05 Differential algebra [See also 12H05.]

Carri, Giuseppe On the differential spectrum of a differential ring. (Italian) 82b:13018

Keigher, William F. Differential algebra in a topos. 82g:13022

Nowicki, Andrzej The primary decomposition of differential modules. 82g:13023

Olver, Peter J. (with Shakiban, Chetrad) A resolution of the Euler operator. I. 82i:13028

Pommaret, Jean-François Galois theory for systems of partial differential equations. (See 82b:81004)

Rubcov, V. N. Cohomology of the Der-complex. (Russian) 82a:13007

Shakiban, Chetrad A resolution of the Euler operator. II. 82i:13029

See also Olver, Peter J., 82i:13028

Sibuya, Yasutaka A linear Pfaffian system at an irregular singularity. 82b:13019

Sokolov, P. V. Special differential rings. (Russian) 82i:13030

secondary classifications:

Fujimoto, Atsuo (with Watanabe, Yoshihide) Symmetries of certain nonlinear evolution equations. (82g:58040)

Sain, Michael K. See Wyman, Bostwick F., (82e:93026)

Salzberg, Pablo M. The minimal generating space of a polynomial. (82b:13005)

Watanabe, Yoshihide See Fujimoto, Atsuo, (82g:58040)

Wyman, Bostwick F. (with Sain, Michael K.) The zero module and essential inverse systems. (82e:93026)

14-XX ALGEBRAIC GEOMETRY

14-01 Elementary exposition, textbooks

(Bell, J.) See Demazure, Michel; et al., 82e:14001

Clemens, Charles Herbert ★A scrapbook of complex curve theory. 82i:14001

De Boer, J. H. Complex projective versus real affine. (Dutch) 82g:14001

Demazure, Michel (with Gabriel, Peter) ★Introduction to algebraic geometry and algebraic groups. 82e:14001

Gabriel, Peter See Demazure, Michel, 82e:14001

Kollar, János Algebraic curves. (Hungarian) 82f:14001

Kunz, Ernst ★Einführung in die kommutative Algebra und algebraische Geometrie. (German) [Introduction to commutative algebra and algebraic geometry] 82c:14001

(German) [Introduction to commutative algebra and algebraic geometry] 82c:14001

Kurke, Herbert Introduction to algebraic geometric methods. (See 82j:53062)

(Mumford, David) See Kunz, Ernst, 82c:14001

Murre, Jacob P. Algebraic curves. (Dutch) 82i:14002

Néron, André ★Notions élémentaires de géométrie algébrique. (French) [Elementary notions of algebraic geometry] 82a:14001

Northcott, D. G. ★Affine sets and affine groups. 82e:14002

Orzech, Grace (with Orzech, Morris) ★Plane algebraic curves. 82e:14002

Orzech, Morris See Orzech, Grace, 82e:14002

Simons, J. Cremona transformations of the projective plane. (Dutch) 82i:14003

Vogel, Wolfgang On Bezout's theorem. 82k:14001

Waterhouse, William C. ★Introduction to affine group schemes. 82e:14003

secondary classifications:

Farkas, Hershel M. (with Kra, Irwin) ★Riemann surfaces. (82c:30067)

Kra, Irwin See Farkas, Hershel M., (82c:30067)

Rosenlicht, Maxwell Initial results in the theory of linear algebraic groups. (82k:20072)

14-02 Advanced exposition (research surveys, monographs, etc.)

Barth, Wolf Paul Algebraische Vektorbündel. 82j:14001

secondary classifications:

Radu, Alexandru Gh. ★Teoria toposurilor. Vol. I. (Romanian) [Theory of topoi. Vol. I] (82i:18001)

14-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Aubert, Karl Egil Abel's addition theorem. (Norwegian. English summary) (82j:01043)

(Deligne, Pierre) See Katz, Nicholas M., (82g:01060)

Katz, Nicholas M. The work of Pierre Deligne. (82g:01060)

Kleinman, Steven L. Chasles's enumerative theory of conics: a historical introduction. (82i:14033)

See also Schubert, Hermann, (82c:01073)

Mumford, David The work of C. P. Ramanujan in algebraic geometry. (82i:01059)

Neuenschwander, E. Riemann und das "Weierstraßsche" Prinzip der analytischen Fortsetzung durch Potenzreihen. (82b:01025)

(Ramanujan, Chidambaram Padmanabhan) See Mumford, David, (82i:01059)

Schubert, Hermann ★Kalkül der abzählenden Geometrie. (German) [Calculus of enumerative geometry] (82c:01073)

Vogel, Wolfgang On Bezout's theorem. (82k:14001)

Bibliography:

Schubert, Hermann See Schubert, Hermann, (82c:01073)

14-04 Explicit machine computation and programs (not the theory of computation or programming)

Buchberger, Bruno A criterion for detecting unnecessary reductions in the construction of Gröbner-bases. 82e:14004

14-06 Proceedings, conferences, etc.

(Artin, Michael) See Contributions to algebraic geometry, 82g:14003

(Beauville, Arnaud) See Conference: Algebraic Geometry, 82a:14003

(Eisenbud, David) See Seminar: Eisenbud, D.-Singh, B.-Vogel, W., 82b:14001

(Gamskrelidze, R. V.) See Current problems in mathematics, 82m:14002

(Hartshorne, Robin) See Algebraic geometry, 82i:14003

(Kervaire, Michel) See Brauer group, 82a:14004

(Lihogober, Anatoly) See Algebraic geometry, 82m:14001

(Mumford, David) See Contributions to algebraic geometry, 82g:14003

(Ojanguren, Manuel) See Brauer group, 82a:14004

(Severi, Francesco) See Symposia Mathematica, 82e:14005

(Singh, Balwant) See Seminar: Eisenbud, D.-Singh, B.-Vogel, W., 82b:14001

(Vogel, Wolfgang) See Seminar: Eisenbud, D.-Singh, B.-Vogel, W., 82b:14001

(Wagreich, Philip) See Algebraic geometry, 82m:14001

(Zariski, Oscar) See Contributions to algebraic geometry, 82g:14003

Algebraic geometry ★Algebraic geometry, Arcata 1974. 82c:14003

★Contributions to algebraic geometry. 82g:14003

★Journées de Géométrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers 1979. 82a:14003

- ★Recent topics in algebraic geometry. (Japanese) 82a:14001
 ★Symposia Mathematica. Vol. XXIV. 82a:14005
 ★Algebraic geometry. 82m:14001
- Algebraic varieties** ★Classification of algebraic varieties (toward the 1980s). (Japanese) 82a:14002
- Angers** ★Journées de Géométrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers 1979. 82a:14003
- Anniversary:**
 Birth of Severi, Francesco ★Symposia Mathematica. Vol. XXIV. 82a:14005
 Arcata, Calif. ★Algebraic geometry, Arcata 1974. 82a:14003
 Brauer group ★Groupe de Brauer. (French) [The Brauer group] 82a:14004
 Chicago, Ill. ★Algebraic geometry. 82m:14001
- Classification of algebraic varieties (toward the 1980s)** ★Classification of algebraic varieties (toward the 1980s). (Japanese) 82a:14002
- Complex analysis of singularities** ★Complex analysis of singularities. 82g:14002
- Conference:**
 Algebraic Geometry ★Journées de Géométrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers 1979. 82a:14003
 Midwest, Algebraic Geometry ★Algebraic geometry. 82m:14001
- Contributions to algebraic geometry** ★Contributions to algebraic geometry. 82g:14003
- Current problems in mathematics** ★Современные проблемы математики. Том 18. (Russian) [Current problems in mathematics. Vol. 18] 82m:14002
- INDAM Symposium:**
 Algebraic Geometry ★Symposia Mathematica. Vol. XXIV. 82a:14005
- Itoji Nauki i Tehniki** ★Современные проблемы математики. Том 18. (Russian) [Current problems in mathematics. Vol. 18] 82m:14002
- Les Plans-sur-Bex** ★Groupe de Brauer. (French) [The Brauer group] 82a:14004
- Proceedings of Symposia in Pure Mathematics** ★Algebraic geometry, Arcata 1974. 82a:14003
- Recent topics in algebraic geometry** ★Recent topics in algebraic geometry. (Japanese) 82a:14001
- Rome** ★Symposia Mathematica. Vol. XXIV. 82a:14005
- Seminar:**
 Eisenbud, D.-Singh, B.-Vogel, W. ★Seminar D. Eisenbud / B. Singh / W. Vogel. Vol. 1. 82b:14001
 Brauer Group ★Groupe de Brauer. (French) [The Brauer group] 82a:14004
- Summer Research Institute:**
 American Mathematical Society ★Algebraic geometry, Arcata 1974. 82a:14003
- Symposia Mathematica** ★Symposia Mathematica. Vol. XXIV. 82a:14005
- Symposium:**
 Classification of Algebraic Varieties (Toward the 1980s) ★Classification of algebraic varieties (toward the 1980s). (Japanese) 82a:14002
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 Leopoldina, Singularities ★Leopoldina-Symposium: Singularitäten—Singularities. [Leopoldina Symposium: Singularities] 82k:14002
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- Thüringen** ★Leopoldina-Symposium: Singularitäten—Singularities. [Leopoldina Symposium: Singularities] 82k:14002
- secondary classifications:
- (Byrnes, Christopher I.) See Geometrical methods for the theory of linear systems. (82b:93003)
- (Friedlander, Eric M.) See Algebraic K-theory. (82e:18001)
- (Geramita, Anthony V.) See Seminar: Queen's, Curves. (82m:14015)
- (Martin, Clyde F.) See Geometrical methods for the theory of linear systems. (82b:93003)
- (Stein, Michael R.) See Algebraic K-theory. (82e:18001)
- Algebraic geometry** ★Applications of commutative rings to algebraic geometry. (82d:13001)
- Algebraic K-theory** ★Algebraic K-theory, Evanston 1980. (82e:18001)
- Applications of commutative rings to algebraic geometry** ★Applications of commutative rings to algebraic geometry. (82d:13001)
- Cambridge, Mass.** ★Geometrical methods for the theory of linear systems. (82b:93003)
- Commutative rings** ★Applications of commutative rings to algebraic geometry. (82d:13001)
- Conference:**
 Algebraic K-Theory ★Algebraic K-theory, Evanston 1980. (82e:18001)
- Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory** ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)
- Differential equations** ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)
- Evanston, Ill.** ★Algebraic K-theory, Evanston 1980. (82e:18001)
- Function theory** ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)
- Geometrical methods for the theory of linear systems** ★Geometrical methods for the theory of linear systems. (82b:93003)
- Kingston, Ont.** ★The Curves Seminar at Queen's. Vol. I. (82m:14015)
- NATO Advanced Study Institute:**
 Geometrical Methods for the Theory of Linear Systems ★Geometrical methods for the theory of linear systems. (82b:93003)
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- Deformation Theory of Linear Differential Equations and a New Viewpoint for Extension of Abelian Function Theory** ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)

14Axx Foundations

14A05 Relevant commutative algebra [See also 13--XX.]

secondary classifications:

Hinič, V. A. Gorenstein complexes and DG-algebras. (Russian. English summary) (82d:13014)

14A10 Varieties

secondary classifications:

Claude, Daniel Realizations and transfer functions of discrete-time nonlinear homogeneous systems. (82b:93016)

14A15 Schemes

secondary classifications:

Artico, Giuliano (with Le Donne, Attilio; Moresco, Roberto) Algebras of real-valued uniform maps. (82f:54023)

Edwards, David A. (with Hastings, Harold M.) Čech theory: its past, present, and future. (82b:55010)

Fontana, Marco On some problems relating to spectral sets. (Italian. English summary) (82f:13001)

Hastings, Harold M. See Edwards, David A., (82b:55010)

Le Donne, Attilio See Artico, Giuliano; et al., (82f:54023)

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van Oystaeyen, F. (with Verschoren, A.) Graded P.I. rings and noncommutative projective schemes. (82g:16003)

Verschoren, A. See van Oystaeyen, F., (82g:16003)

14A20 Generalizations (algebraic spaces, motifs)

secondary classifications:

Delfs, Hans (with Knebusch, Manfred) Semialgebraic topology over a real closed field. II. Basic theory of semialgebraic spaces. (82m:14011)

Knebusch, Manfred See Delfs, Hans, (82m:14011)

Verschoren, A. Birationality of P.I. rings and noncommutative varieties. (82b:16013)

14A25 Elementary questions

Rollero, Aldo Some remarks on certain invariants of a binary quartic form. (Italian. English and French summaries) 82d:14002

Turrisi, Cristina Parametrization of the linear spaces of a quadric hypersurface. (Italian. English summary) 82k:14003

secondary classifications:

Černjakov, A. G. On the structure of the set of degenerate finite noncooperative games. (German and Russian summaries) (82g:90081)

14A99 None of the above, but in this section

secondary classifications:

Carter, David S. (with Vogt, Andrew) Collinearity-preserving functions between Desarguesian planes. (82b:51009)

Li, Shuo-Yen Robert See Li, Wen Ch'ing Winnie, (82d:10033)

Li, Wen Ch'ing Winnie (with Li, Shuo-Yen Robert) On generators of ideals associated with unions of linear varieties. (82d:10033)

Ramanan, S. A note on C. P. Ramanujam. (82j:01070)

(Ramanujam, Chidambaram Padmanabhan) See Ramanan, S., (82j:01070)

Vogt, Andrew See Carter, David S., (82b:51009)

14Bxx Local theory [See also 32Bxx.]

14B05 Singularities [See also 14E15, 32B30, 32C40, 58C27.]

Borho, Walter (with MacPherson, Robert) Représentations des groupes de Weyl et homologie d'intersection pour les variétés nilpotentes. (English summary) 82f:14002

Campillo López, Antonio ★Algebraic curves in positive characteristic. 82h:14001

Chirli, Nadia Characterizations of certain singularities of a branched covering. 82g:14004

Cumino, Caterina (with Manaresi, Mirella) On the singularities of weakly normal varieties. 82j:14002

Ebeling, Wolfgang Quadratische Formen und Monodromiegruppen von Singularitäten. 82j:14003

Gupta, S. K. (with Roberts, Leslie G.) The Hilbert function and Cohen-Macaulay type of ordinary singularities. 82k:14004

Herzog, Bernd Effect of certain flat local extensions on the local Hilbert functions. 82g:14005

Kawamata, Yujiro On singularities in the classification theory of algebraic varieties. 82f:14003

Kirillov, A. N. Formula for calculating the integral cohomology of the boundary of an isolated hypersurface singularity. (Russian) 82h:14002

Knörrer, Horst ★Isolierte Singularitäten von Durchschnitten zweier Quadriken.

(German) [Isolated singularities of the intersections of two quadrics] 82g:14006

Die Singularitäten vom Typ \tilde{D} . 82a:14005

- Kraft, Hanspeter (with Procesi, Claudio) Minimal singularities in GL_n . 82e:14007
 Ljubozer, Anatoly Some properties of the signature of complete intersections. 82h:14003
 Lipman, Joseph (with Teissier, Bernard) Pseudorational local rings and a theorem of Briançon-Skoda about integral closures of ideals. 82f:14004
 MacPherson, Robert See Borho, Walter, 82f:14002
 Manaresi, Mirella See Cumino, Caterina, 82j:14002
 Nakamura, Iku Inoue-Hirzebruch surfaces and a duality of hyperbolic unimodular singularities. I. 82g:14007
 Perron, Bernard Le nœud "huit" est algébrique réel. (English summary) 82f:14005
 Platonova, O. A. Singularities of relative position of a surface and a line. (Russian) 82d:14003
 Procesi, Claudio See Kraft, Hanspeter, 82e:14007
 Roberts, Leslie G. Some examples of smooth and regular rings. 82e:14008
 See also Gupta, S. K., 82c:14004
 Singh, Balwant Formal invariance of local characteristic functions. 82g:14008
 On two theorems on normal flatness. 82g:14009
 Slodowy, Peter ★Four lectures on simple groups and singularities. 82h:14002
 Teissier, Bernard See Lipman, Joseph, 82f:14004
 Vartenko, A. N. Asymptotic behavior of holomorphic forms determines a mixed Hodge structure. (Russian) 82g:14010
 On the monodromy operator in vanishing cohomology and the multiplication operator by f in the local ring. (Russian) 82h:14005

secondary classifications:

- Bădescu, Lucian Dualizing divisors of two-dimensional singularities. (82c:14029)
 Bruce, J. W. (with Giblin, P. J.) A stratification of the space of plane quartic curves. (82j:14022)
 Čmutov, S. V. Monodromy groups of singularities of functions of two variables. (Russian) (82c:32022)
 (Demazure, Michel) See Seminar: Singularities of Surfaces, (82d:14021)
 Doković, Dragomir Ž. Closures of conjugacy classes in the classical complex Lie groups. (82h:22006)
 Dolgachev, Igor Newton polyhedra and factorial rings. (82e:13018a)
 Correction to: "Newton polyhedra and factorial rings". (82e:13018b)
 Flenner, Hubert Rationale quasihomogene Singularitäten. (82g:14036)
 François, Jean-Pierre Systèmes maximaux d'une singularité quasi homogène. (English summary) (82g:32014)
 Fujiki, Akira On the theory of singularities of complex analytic spaces. (Japanese) (82c:32035)
 Giblin, P. J. See Bruce, J. W., (82j:14022)
 Goto, Shiro On Gorenstein rings. (Japanese) (82g:13019)
 de la Harpe, P. (with Siegfried, P.) Singularités de Klein. (82c:32010)
 Kleiman, Steven L. The enumerative theory of singularities. (Russian) (82c:14048)
 (Kulikov, V. S.) See Kleiman, Steven L., (82g:14048)
 Langevin, Rémi ★Courbures, feuilletages et surfaces. (French) [Curvatures, foliations and surfaces] (82j:53117)
 Livšic, I. S. Automorphisms of the complement to the bifurcation set of functions for simple singularities. (Russian) (82h:32014)
 McKay, John Graphs, singularities, and finite groups. (82e:20014)
 Nakajima, Haruhisa On some invariant subrings of polynomial rings in positive characteristics. (82h:13012)
 Palamodov, V. P. Asymptotic behavior of oscillating integrals with an isolated stationary phase point. (Russian) (82g:58003)
 (Pinkham, Henry Charles) See Seminar: Singularities of Surfaces, (82d:14021)
 Rossi, Maria Evelina On symmetric algebras which are Cohen Macaulay. (82m:13016)
 Salanova Martinez, M. A. Amparo The Mumford variety associated to an $N_1^{(1)}$ and an $N_2^{(2)}$. (Spanish) (82h:14007)
 Sally, Judith D. Good embedding dimensions for Gorenstein singularities. (82c:13031)
 Seibt, Peter Differential criteria on the permissibility of a blowing-up. (82c:13004)
 Siegfried, P. See de la Harpe, P., (82c:32010)
 (Teissier, Bernard) See Seminar: Singularities of Surfaces, (82d:14021)
 Teixidor, J. Sur le calcul du nombre de Milnor. (82h:32011)
 Wall, C. T. C. Stability, pencils and polytopes. (82h:58009)
 Singularities of nets of quadrics. (82e:14016)
 Watanabe, Kimio On plurigenera of normal isolated singularities. I. (82f:32025)
 Zariski, Oscar Abstract of the paper: "Foundations of a general theory of equisingularity on r -dimensional algebroid and algebraic varieties, of embedding dimension $r+1$ " [Amer. J. Math. 101 (1979), no. 2, 453–514; MR 81m:14005]. (82g:14018)
 Palaiseau ★Séminaire sur les Singularités des Surfaces. (French) [Seminar on the Singularities of Surfaces] (82d:14021)
 Seminar:
 Singularities of Surfaces ★Séminaire sur les Singularités des Surfaces. (French) [Seminar on the Singularities of Surfaces] (82d:14021)
 Singularities of surfaces ★Séminaire sur les Singularités des Surfaces. (French) [Seminar on the Singularities of Surfaces] (82d:14021)

14B07 Deformations of singularities [See also 14D15, 32C40, 32G05, 32G11, 32G13.]

- Vitulli, Marie A. The obstruction of the formal moduli space in the negatively graded case. 82e:14006
 Wahl, Jonathan M. Elliptic deformations of minimally elliptic singularities. 82d:14004

secondary classifications:

- Greuel, Gert-Martin Dualität in der lokalen Kohomologie isolierter Singularitäten. (82c:32009)
 Kleppe, H. (with Laksov, D.) The algebraic structure and deformation of Pfaffian schemes. (82b:14027)

- Laksov, D. See Kleppe, H., (82b:14027)
 Nakamura, Iku Inoue-Hirzebruch surfaces and a duality of hyperbolic unimodular singularities. I. (82g:14007)
 Reid, Miles Canonical 3-folds. (82i:14025)

14B10 Infinitesimal methods

- Faltings, Gerd Some theorems about formal functions. 82h:14004
 Seibt, Peter Infinitesimal extensions of commutative algebras. 82c:14007

secondary classifications:

- Scheja, Günter (with Wiebe, Hartmut) Zur Chevalley-Zerlegung von Derivationen. (English summary) (82d:13008)
 Wiebe, Hartmut See Scheja, Günter, (82d:13008)

14B12 Local deformation theory, Artin approximation, etc.

- Becker, Joseph A. (with Lipshitz, Leonard) Remarks on the elementary theories of formal and convergent power series. 82i:14004a
 (with Lipshitz, Leonard) Errata to the paper: "Remarks on the elementary theories of formal and convergent power series". 82i:14004b
 Estrada, Mario Einige Bemerkungen über Ringe mit Approximationseigenschaft. [Some comments on rings with the approximation property] 82m:14003
 Lipshitz, Leonard See Becker, Joseph A., 82i:14004

secondary classifications:

- Bingener, Jürgen Darstellbarkeitskriterien für analytische Funktoren. (82c:32047)
 Bosch, Siegfried A rigid analytic version of M. Artin's theorem on analytic equations. (82c:32067)
 Denef, J. (with Lipshitz, Leonard) Ultraproducts and approximation in local rings. II. (82g:13021)
 Ishii, Shihoko Moduli of subrings of a local ring. (82c:14014)
 Lipshitz, Leonard See Denef, J., (82g:13021)
 Pfister, Gerhard (with Popescu, Dorin) Die Approximationseigenschaft von Primidealen. (English and Russian summaries) (82d:13022)
 (with Popescu, Dorin) On three-dimensional local rings with the property of approximation. (82i:13022)
 Popescu, Dorin A remark on two-dimensional local rings with the property of approximation. (82h:13012)
 See also Pfister, Gerhard, (82d:13022) and (82i:13022)
 Robba, Philippe Une propriété de spécialisation continue (d'après Artin, Bosch, Lang, van den Dries). (82m:13019)

14B15 Local cohomology [See also 32C36.]

- Faltings, Gerd Über lokale Kohomologieguppen hoher Ordnung. 82f:14006
 Lorenzani, Massimo (with Maschietti, Antonio) Algebraic and analytic local cohomology for affine schemes. (Italian summary) 82c:14006
 Maschietti, Antonio See Lorenzani, Massimo, 82c:14006
 Roberts, Paul Cohen-Macaulay complexes and an analytic proof of the new intersection conjecture. 82e:14009
 Rush, David E. Big Cohen-Macaulay modules. 82e:14010

secondary classifications:

- Bijan-Zadeh, M. H. A common generalization of local cohomology theories. (82e:13012)
 Faltings, Gerd Der Endlichkeitssatz in der lokalen Kohomologie. (82f:13003)
 Goto, Shiro (with Shimoda, Yasuhiro) On Rees algebras over Buchsbaum rings. (82c:13028)
 Roberts, Paul ★Homological invariants of modules over commutative rings. (82j:13020)
 Schenzel, Peter Zur lokalen Kohomologie des kanonischen Moduls. (82e:13014)
 Sharp, R. Y. On the attached prime ideals of certain Artinian local cohomology modules. (82c:13015)
 Shimoda, Yasuhiro See Goto, Shiro, (82c:13028)

14B20 Formal neighborhoods

- Faltings, Gerd Algebraisation of some formal vector bundles. 82e:14011

secondary classifications:

- Faltings, Gerd Some theorems about formal functions. (82h:14004)
 Rothaus, Christel Zur Komplettierung ausgezeichneter Ringe. (82c:13023)
 Weibel, Charles A. K_2 , K_3 and nilpotent ideals. (82c:18016)

14B25 Local structure of maps: étale, flat, etc. [See also 13--XX, 14E40.]

- Morris, Robert A. (with Wang, Stuart Sui Sheng) A Jacobian criterion for smoothness. 82j:14004
 Ngô Việt Trung Spezialisierungen allgemeiner Hyperflächenschnitte und Anwendungen. 82j:14005
 Wang, Stuart Sui Sheng See Morris, Robert A., 82j:14004

secondary classifications:

- Lazarus, Michel Fermeture intégrale et changement de base. [Integral closure and base change] (See 82m:13001)
 Marot, Jena Conservation des propriétés des fibres formelles d'un anneau semi-local noethérien par complétion adique. [Preservation of the properties of the formal fibers of a Noetherian semilocal ring under adic completion] (See 82m:13001)

14B99 None of the above, but in this section

Platte, Erich Pure descent for the module of Zariiski differentials. **82c:14008**

14Cxx Cycles and subschemes

Bloch, Spencer ★ Lectures on algebraic cycles. **82c:14012**

14C05 Parametrization (Chow and Hilbert schemes)

Barlet, Daniel Convexit  au voisinage d'un cycle. **82f:14007**

Conte, A. (with Murre, Jacob P.) The Hodge conjecture for Fano complete intersections of dimension four. **82b:14003**

Murre, Jacob P. See Conte, A., **82b:14003**

secondary classifications:

Barlet, Daniel Familles analytiques de cycles et classes fondamentales relatives. **(82d:32013)**

Le Barz, Patrick Quadris cantes d'une surface de P^5 . (English summary) **(82a:14023)**

14C10 Equivalence relations

14C15 Rational equivalence rings

Murre, Jacob P. Algebraic cycles on certain types of Fano threefolds. **82g:14011**

secondary classifications:

Bacławski, Kenneth The M bius algebra as a Grothendieck ring. **(82k:18002)**

Colliot-Th  ne, Jean-Louis (with Sansuc, Jean-Jacques) La descente sur les vari  t  s rationnelles. **(82d:14016)**

Formes quadratiques multiplicatives et vari  t  s alg  briques: deux compl  ments. (German summary) **(82g:10040)**

(with Ischebeck, Friedrich) L'  quivalence rationnelle sur les cycles de dimension z  ro des vari  t  s alg  briques r  elles. (English summary) **(82j:14019)**

Donagi, Ron Group law on the intersection of two quadrics. **(82b:14025)**

Ischebeck, Friedrich See Colliot-Th  ne, Jean-Louis, **(82j:14019)**

Jurkiewicz, J. Chow ring of projective nonsingular torus embedding. **(82m:14025)**

Sansuc, Jean-Jacques See Colliot-Th  ne, Jean-Louis, **(82d:14016)**

14C17 Intersection theory

Lomadze, V. G. Index of intersection of divisors. (Russian) **82f:14008**

van der Waerden, B. L. The connectedness theorem and the concept of multiplicity. **82c:14013**

14C20 Divisors, linear systems

B  descu, Lucian Autres r  sultats sur les diviseurs amples. (English summary) **82g:14012**

Buium, Alexandru Espaces projectifs anisotropes et diviseurs amples. (English summary) **82c:14014**

Greco, Silvio (with Valabrega, Paolo) On the theory of adjoints. **82c:14015**

Palleschi, Marino Remarks on the vanishing of the first irregularity index of a divisor. (Italian. English summary) **82b:14005**

Valabrega, Paolo See Greco, Silvio, **82c:14015**

secondary classifications:

Arbarello, Enrico (with Cornalba, Maurizio) On a conjecture of Petri. (Italian) **(82k:14029)**

Cornalba, Maurizio See Arbarello, Enrico, **(82k:14029)**

Fulton, William (with Lazarsfeld, R.) On the connectedness of degeneracy loci and special divisors. **(82k:14016)**

Harris, Joseph Daniel A bound on the geometric genus of projective varieties. **(82h:14010)**

Horiuchi, Ryutaro On the existence of meromorphic functions with certain lower order on nonhyperelliptic Riemann surfaces. **(82i:14013)**

Lazarsfeld, R. See Fulton, William, **(82k:14016)**

Martens, G. Funktionen von vorgegebener Ordnung auf komplexen Kurven. **(82c:14034)**

Miyayoshi, Masayoshi (with Sugie, Tohru) On a projective plane curve whose complement has logarithmic Kodaira dimension $-\infty$. **(82k:14013)**

Ramanan, S. A note on C. P. Ramanan. **(82j:01070)**

(Ramanan, Chidambaram Padmanabhan) See Ramanan, S., **(82j:01070)**

Sugie, Tohru See Miyayoshi, Masayoshi, **(82k:14013)**

Van de Ven, A. On the 2-connectedness of very ample divisors on a surface. **(82f:14032)**

14C21 Webs, nets [See also 53A60.]

Wall, C. T. C. Singularities of nets of quadrics. **82c:14016**

secondary classifications:

Akivis, M. A. Webs and almost Grassmannian structures. (Russian) **(82a:53016)**

Beauville, Arnaud G  om  trie des tissus [d'apr  s S. S. Chern et P. A. Griffiths]. **(82a:53017)**

(Chern, Shiing Shen) See Beauville, Arnaud, **(82a:53017)**

(Griffiths, Phillip A.) See Beauville, Arnaud, **(82a:53017)**

  gova, T. B. On a class of two-parameter families of two-dimensional planes in P_5 with a hexagonal focal web. (Russian) **(82f:53026)**

14C22 Picard groups

Kang, Ming Chang Picard groups of some rings of invariants. **82m:14004**

secondary classifications:

Donagi, Ron Group law on the intersection of two quadrics. **(82b:14025)**

Rush, David E. Seminormality. **(82h:13016)**

Swan, Richard G. On seminormality. **(82d:13006)**

14C25 Zero-cycles

Bloch, Spencer On an argument of Mumford in the theory of algebraic cycles. **82i:14005**

Inose, H. (with Mizukami, M.) Rational equivalence of 0-cycles on some surfaces of general type with $p_g=0$. **82c:14009**

Mizukami, M. See Inose, H., **82c:14009**

Morrison, Kent Geometric equivalence relations on modules. **82k:14007**

secondary classifications:

Colliot-Th  ne, Jean-Louis (with Ischebeck, Friedrich) L'  quivalence rationnelle sur les cycles de dimension z  ro des vari  t  s alg  briques r  elles. (English summary) **(82j:14019)**

Ischebeck, Friedrich See Colliot-Th  ne, Jean-Louis, **(82j:14019)**

14C30 Transcendental methods, Hodge theory [See also 32J25.]

Carlson, James A. Extensions of mixed Hodge structures. **82g:14013**

(with Griffiths, Phillip A.) Infinitesimal variations of Hodge structure and the global Torelli problem. **82h:14006**

Du Bois, Philippe Complexe de de Rham filtr   d'une vari  t   singuli  re. **82j:14006**

Elzein, Fouad Structures de Hodge mixtes. (English summary) **82c:14010**

Fujiki, Akira Duality of mixed Hodge structures of algebraic varieties. **82h:14007**

Griffiths, Phillip A. See Carlson, James A., **82g:14006**

Ran, Ziv Cycles on Fermat hypersurfaces. **82d:14005**

Terao, Hiroaki Forms with logarithmic pole and the filtration by the order of the pole. **82h:14004**

Usui, Sampei Note on the example of Kinef. **82b:14005**

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Burui  ni, Nicolae The Picard variety of a smooth projective curve. (Romanian. English summary) **(82c:14035)**

Carlson, James A. (with Cattani, Eduardo H.; Kaplan, Aroldo G.) Mixed Hodge structures and compactifications of Siegel's space (preliminary report). **(82i:32053)**

Cattani, Eduardo H. (with Kaplan, Aroldo G.) On the local monodromy of a variation of Hodge structure. **(82j:32049)**

See also Carlson, James A.; et al., **(82i:32053)**

Kaplan, Aroldo G. See Carlson, James A.; et al., **(82i:32053)** and Cattani, Eduardo H., **(82j:32049)**

Rusek, Kamil (with Winiarski, Tadeusz) Criteria for regularity of holomorphic mappings. (Russian summary) **(82i:32055)**

Tihomirov, A. S. The intermediate Jacobian of double P^3 that is branched in a quartic. (Russian) **(82k:14041)**

Todorov, A. N. Surfaces of general type with $p_g=1$ and $(K, K)=1$. I. **(82i:14024)**

Varčenko, A. N. Asymptotic behavior of holomorphic forms determines a mixed Hodge structure. (Russian) **(82g:14010)**

Winiarski, Tadeusz See Rusek, Kamil, **(82i:32055)**

14C35 Applications of methods of algebraic K -theory [See also 14F05, 18F25.]

Bloch, Spencer Applications of the dilogarithm function in algebraic K -theory and algebraic geometry. **82f:14009**

Dayton, Barry H. Seminormality and the Chinese remainder theorem. (See **82m:14015**)

Grayson, Daniel R. Localization for flat modules in algebraic K -theory. **82c:14011**

Soul  , Christophe K -th  orie et correspondances alg  briques. (English summary) **82i:14012**

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secondary classifications:

Colliot-Th  ne, Jean-Louis Formes quadratiques multiplicatives et vari  t  s alg  briques: deux compl  ments. (German summary) **(82g:10040)**

Friedlander, Eric M.   tale K -theory. I. Connections with   tale cohomology and algebraic vector bundles. **(82c:14029)**

Gillet, Henri Riemann-Roch theorems for higher algebraic k -theory. **(82d:14006)**

Lomadze, V. G. Index of intersection of divisors. (Russian) **(82f:14008)**

Ramakrishnan, Dinakar A regulator for curves via the Heisenberg group. **(82m:12008)**

14C40 Riemann-Roch theorems [See also 14F12.]

Gillet, Henri Riemann-Roch theorems for higher algebraic k -theory. **82d:14006**

secondary classifications:

Baum, Paul (with Fulton, William; MacPherson, Robert) Riemann-Roch and topological K theory for singular varieties. **(82c:14021)**

(with Fulton, William; Quart, George) Lefschetz-Riemann-Roch for singular varieties. **(82c:14022a)**

Dayton, Barry H. (with Roberts, Leslie G.) Seminormality of unions of planes. (82m:13014b)

Fulton, William See Baum, Paul; et al., (82c:14021) and (82c:14022a)

MacPherson, Robert See Baum, Paul; et al., (82c:14021)

Quart, George Localization theorem in K -theory for singular varieties. (82c:14022b)

See also Baum, Paul; et al., (82c:14022a)

Roberts, Leslie G. See Dayton, Barry H., (82m:13014b)

14C99 None of the above, but in this section

Cih, A. K. Bezout's theorem in space, theories of functions. Solution of systems of algebraic equations. (Russian) 82z:14008

Bori, Samuel A. (with Ingelton, Aubrey W.) Tangent flag bundles and Jacobian varieties. I. (Italian summary) 82g:14014

Ingelton, Aubrey W. See Bori, Samuel A., 82g:14014

Viola, Paolo On maximal systems of linear subvarieties of special complete intersections. (Italian. English summary) 82e:14017

14Dxx Families, fibrations

14D05 Structure of families (Picard-Lefschetz, Picard-Fuchs theory, etc.)

Bruce, J. W. On complex projective hypersurfaces. 82i:14007

van den Essen, Arno Regular singularities along normal crossings. 82a:14004

Golubeva, V. A. Reconstruction of a Pfaff system of Fuchs type from the generators of the monodromy group. (Russian) 82i:14008

Hubbard, John H. The monodromy of projective structures. 82k:14009

secondary classifications:

Bertrand, Daniel Travaux récents sur les points singuliers des équations différentielles linéaires. (82a:34007)

Chudnovsky, David V. Riemann monodromy problem, isomonodromy deformation equations and completely integrable systems. (82g:58036)

Flaschka, Hermann (with Newell, Alan C.) Monodromy- and spectrum-preserving deformations. I. (82g:35103)

Gusein-Zade, S. M. Distinguished bases of simple singularities. (Russian) (82f:32015)

Kirillov, A. N. Formula for calculating the integral cohomology of the boundary of an isolated hypersurface singularity. (Russian) (82k:14002)

Maehara, Kazuhisa Family of varieties dominated by a variety. (82e:14018)

Mebkhout, Zoghman Sur le problème de Hilbert-Riemann. (82a:32015)

Miyazaki, Masayoshi (with Sugie, Tohru) Generically rational polynomials. (82e:14019)

Newell, Alan C. See Flaschka, Hermann, (82g:35103)

Ramis, Jean-Pierre Les séries k -sommables et leurs applications. (82k:32033)

Sasaki, Takeshi (with Takano, Kyoichi) On Appell's systems of hypergeometric differential equations. (82i:35030)

Sugie, Tohru See Miyazaki, Masayoshi, (82e:14019)

Takano, Kyoichi Monodromy group of the system for Appell's F_4 . (82a:33008)

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Varenko, A. N. On the monodromy operator in vanishing cohomology and the multiplication operator by f in the local ring. (Russian) (82k:14005)

Yuan, Hsi Shih Picard-Lefschetz transformation on homotopy groups. (82k:55016)

14D10 Arithmetic ground fields (finite, local, global)

14D15 Formal methods; deformations [See also 13D10, 14B07, 16A58, 32Gxx.]

Briançon, J. (with Henry, Jean-Pierre-Georges) Équisingularité générique des familles de surfaces à singularité isolée. (English summary) 82f:14007

Harbater, David Moduli of p -covers of curves. 82f:14010

Henry, Jean-Pierre-Georges See Briançon, J., 82f:14007

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Mazzola, Guérino Generic finite schemes and Hochschild cocycles. 82k:14010

secondary classifications:

Avramov, Luchezar L. (with Herzog, Jürgen) The Koszul algebra of a codimension 2 embedding. (82g:13011)

Bingener, Jürgen Offenheit der Versalität in der analytischen Geometrie. (82b:32025)

Harbater, David Deformation theory and the tame fundamental group. (82f:14014)

Herzog, Jürgen See Avramov, Luchezar L., (82g:13011)

Klepp, Jan O. Deformations of graded algebras. (82f:13017)

Lipman, Joseph (with Teissier, Bernard) Pseudorational local rings and a theorem of Briançon-Skoda about integral closures of ideals. (82f:14004)

Malgrange, Bernard Méthode de la phase stationnaire et sommation de Borel. (82a:41028)

Tannenbaum, Allen Families of algebraic curves with nodes. (82b:14017)

Castelnuovo curves and unobstructed deformations. (82f:14024)

Teissier, Bernard See Lipman, Joseph, (82f:14004)

14D20 Algebraic moduli problems [For analytic moduli problems, see 32G13.]

Fitzner, Heinz-Jörg (with Kleinert, Werner; Kurke, Herbert; Pfister, Gerhard; Rozen, Marko; Zink, Thomas) Modulprobleme in der algebraischen Geometrie. III. 82i:14011

Harris, Joseph Daniel A bound on the geometric genus of projective varieties. 82b:14010

Ishii, Shihoko Moduli of subrings of a local ring. 82c:14014

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Kleinert, Werner See Fitzner, Heinz-Jörg; et al., 82i:14011

Kurke, Herbert See Fitzner, Heinz-Jörg; et al., 82i:14011

Lai, K. F. (with Wong, Bun) Two moduli problems and some of their connections with differential geometry. 82b:14006

Maehara, Kazuhisa Family of varieties dominated by a variety. 82e:14018

Maruyama, Masaki Moduli of stable sheaves. II. 82b:14011

The theorem of Grauert-Mülich-Spindler. 82b:14012

Matsusaka, Teruhisa ★ On polarized varieties. 82b:14012

Errata to: "On polarized varieties of dimension 3. I" [Amer. J. Math. 101 (1979), no. 1, 212-232; MR 81d:14010]. 82i:14011

On polarized varieties of dimension 3. II. 82j:14008

Newstead, P. E. Invariants of pencils of binary cubics. 82b:14007

Pfister, Gerhard See Fitzner, Heinz-Jörg; et al., 82i:14011

Rozen, Marko See Fitzner, Heinz-Jörg; et al., 82i:14011

Salanova Martinez, M. Amparo The Mumford variety associated to an $N_1^{(1)}$ and an $N_2^{(2)}$. (Spanish) 82b:14007

Ueno, Kenji Classification of algebraic varieties. II. Algebraic threefolds of parabolic type. 82f:14012

Wilson, P. M. H. On complex algebraic varieties of general type. 82i:14008

Wong, Bun See Lai, K. F., 82b:14006

Zink, Thomas See Fitzner, Heinz-Jörg; et al., 82i:14011

secondary classifications:

Baillieu, John Controllability and observability of polynomial dynamical systems. (82j:93007)

Byrnes, Christopher I. On the stabilizability of linear control systems depending on parameters. (82a:93011)

(with Duncan, Tyrone E.) A note on the topology of spaces of Hamiltonian transfer functions. (82f:93017)

Campana, Frédéric Images directes de cycles compacts par un morphisme et application à l'espace des cycles des tores. (82c:32056)

Conte, C. See Perdon, A. M., (82b:93015)

Dubrovnik, B. A. (with Novikov, S. P.) Ground states of a two-dimensional electron in a periodic magnetic field. (82i:81018)

Duncan, Tyrone E. An algebro-geometric approach to estimation and stochastic control for linear pure delay time systems. (82m:93083)

See also Byrnes, Christopher I., (82f:93017)

Fujita, Takao On the structure of polarized manifolds with total deficiency one. I. (82a:14015)

Hazewinkel, Michiel (Fine) moduli (spaces) for linear systems: what are they and what are they good for? (82g:93024)

A partial survey of the uses of algebraic geometry in systems and control theory. (82j:93014)

Hoppe, Hans Jürgen (with Spindler, Heinz) Modulräume stabiler 2-Bündel auf Regelflächen. (82e:14018)

Kawamata, Yujiro On singularities in the classification theory of algebraic varieties. (82f:14003)

Khad, Amr S. (with Martin, Clyde F.) On the $GL(n)$ action on linear systems: the orbit closure problem. (82e:93025)

Martin, Clyde F. See Khad, Amr S., (82e:93025)

Newstead, P. E. Correction to: "Rationality of moduli spaces of stable bundles" [Math. Ann. 215 (1975), 251-268; MR 54 #7468]. (82d:14011)

Novikov, S. P. See Dubrovnik, B. A., (82i:81018)

Perdon, A. M. (with Conte, C.) On canonical form for completely reachable dynamical systems. (82b:93015)

Rouchaleau, Y. Commutative algebra in system theory. (82f:93020)

Spindler, Heinz See Hoppe, Hans Jürgen, (82e:14018)

Trautmann, Günther Zur Berechnung von Yang-Mills Potentialen durch holomorphe Vektorbündel. (82f:14017)

Ueno, Kenji Birational geometry of algebraic threefolds. (82i:14026)

Viehweg, Eckart Klassifikationstheorie algebraischer Varietäten der Dimension drei. (82e:14027)

Wilson, P. M. H. The pluricanonical map on varieties of general type. (82e:14041)

14D22 Fine structure of moduli spaces

secondary classifications:

Atiyah, Michael F. (with Bott, Raoul) Yang-Mills and bundles over algebraic curves. (82e:14021)

Bott, Raoul See Atiyah, Michael F., (82e:14021)

Hartshorne, Robin Stable reflexive sheaves. (82b:14011)

Hazewinkel, Michiel On the nonexistence of continuous canonical forms for linear dynamical systems. (82a:93029)

Hulek, Klaus On the classification of stable rank- r vector bundles over the projective plane. (82b:14012)

Le Potier, J. Stabilité et amplitude sur $P_2(\mathbb{C})$. (82b:14013)

14D25 Geometric invariants [See also 14L30.]

Miranda, Rick On the stability of pencils of cubic curves. 82j:14009

Springer, T. A. Invariant theory, old and new. (Dutch) 82g:14016

secondary classifications:

Edge, W. L. A pencil of four-nodal plane sextics. (82f:14053)

Fogarty, John Kähler differentials and Hilbert's fourteenth problem for finite groups. (82c:13006)

Hadžiev, Dž. ★ Теория инвариантов бинарных форм. (Russian) [Theory of invariants of binary forms] (82k:14048)

- Hulek, Klaus On the classification of stable rank- r vector bundles over the projective plane. (82b:14012)
- Kac, Victor G. Infinite root systems, representations of graphs and invariant theory. (82j:16050)
- Kang, Ming Chang Picard groups of some rings of invariants. (82m:14004)
- Morikawa, Hisasi Some analytic and geometric applications of the invariant theoretic method. (82f:30049)
- Nakajima, Haruhisa On some invariant subrings of polynomial rings in positive characteristics. (82h:13012)
- Northcott, D. G. ★Affine sets and affine groups. (82c:14002)
- Oda, Tadao (with Seshadri, C. S.) Compactifications of the generalized Jacobian variety. (82c:14054)
- Ramanan, S. A note on C. P. Ramanujam. (82j:01070)
- (Ramanujam, Chidambaram Padmanabhan) See Ramanan, S., (82j:01070)
- Rollero, Aldo Some remarks on certain invariants of a binary quartic form. (Italian. English and French summaries) (82d:14002)
- Rotiflon, Denis Deux contre-exemples à une conjecture de R. Stanley sur les anneaux d'invariants intersections complètes. (English summary) (82f:13007)
- Seidenberg, A. On the functions invariant under the action of an algebraic group on an algebraic variety. (Italian summary) (82c:14059)
- Servidio, Frank J. The $GL(V)$ -module structure of $S^*(S^*(V))$, symmetric tensors of degree t on symmetric tensors of degree r on V . (82f:15021)
- Seshadri, C. S. See Oda, Tadao, (82c:14054)
- Shah, Jayant A complete moduli space for $K3$ surfaces of degree 2. (82j:14030)

14D99 None of the above, but in this section

secondary classifications:

- Maeda, Hirokazu Recent trends in linear systems theory. (Japanese) (82b:93008)

14Exx Mappings and correspondences

- Husemoller, D. Finite automorphism groups of algebraic varieties. 82f:14019

14E05 Rational maps, birational correspondences

- Desalvo, Fausto (with Manaresi, Mirella) On birational coverings. 82d:14008
- Lewin-Ménégaux, Renée See Martin-Deschamps, Mireille, 82g:14017
- Manaresi, Mirella See Desalvo, Fausto, 82d:14008
- Martin-Deschamps, Mireille (with Lewin-Ménégaux, Renée) Surfaces de type général dominées par une variété fixe. (English summary) 82g:14017
- Miyajima, Masayoshi (with Sugie, Tohru) Generically rational polynomials. 82c:14019
- (with Sugie, Tohru) On a projective plane curve whose complement has logarithmic Kodaira dimension $-\infty$. 82d:14013
- Moroianu, Mihnea Un critère de contractibilité algébrique. (Italian summary) 82h:14013
- Sugie, Tohru See Miyajima, Masayoshi, 82c:14019 and 82d:14013
- Teicher, Mina Factorization of a birational morphism between 4-folds. 82d:14014
- Yoshida, Ken-ichi Polynomial rings which are simple birational extensions over $k[X, Y]$. 82m:14005

secondary classifications:

- Edge, W. L. A pencil of four-nodal plane sextics. (82f:14053)
- Fujiki, Akira On the minimal models of complex manifolds. (82f:32027)
- Noëka, E. I. Uniqueness theorems for rational functions on algebraic varieties. (Russian) (82f:32040)
- Persson, Ulf (with Pinkham, Henry Charles) Degeneration of surfaces with trivial canonical bundle. (82f:14030)
- Pinkham, Henry Charles See Persson, Ulf, (82f:14030)
- Sugie, Tohru On a characterization of surfaces containing cylinderlike open sets. (82c:14026)

14E07 Structure of Cremona group and generalizations

- Bass, Hyman Applications polynomiales à jacobienne constante. [Polynomial mappings with constant Jacobian] (See 82m:10006)
- Jagšev, A. V. On a problem of O.-H. Keller. (Russian) 82c:14020

secondary classifications:

- Naruki, Isao (with Sekiguchi, Jirō) A modification of Cayley's family of cubic surfaces and birational action of $W(E_6)$ over it. (82j:14032a)
- Cross ratios as moduli of cubic surfaces. (82j:14032b)
- Sekiguchi, Jirō See Naruki, Isao, (82j:14032a)

14E10 General correspondences

14E15 Global theory of singularities, resolution [See also 14B05, 32C45.]

- Barattero, Rosalba (with Zatini, Elsa) Relations between the type of a point on an algebraic variety and the type of its tangent cone. (82f:14013)
- Bruce, J. W. An upper bound for the number of singularities on a projective hypersurface. 82h:14014
- Zariski, Oscar Abstract of the paper: "Foundations of a general theory of equisingularity on r -dimensional algebroid and algebraic varieties, of embedding dimension $r+1$ " [Amer. J. Math. 101 (1979), no. 2, 453-514; MR 81m:14005]. 82g:14018
- Zatini, Elsa See Barattero, Rosalba, 82f:14013

secondary classifications:

- Achilles, Rüdiger (with Schenzel, Peter; Vogel, Wolfgang) Bemerkungen über normale Flachheit und normale Torsionsfreiheit und Anwendungen. (82i:13018)
- Ceccherini, P. V. (with Hirschfeld, J. W. P.) On the number of zeros over a finite field of certain symmetric polynomials. (82c:12021)
- Fujiki, Akira On the minimal models of complex manifolds. (82f:32027)
- Herzog, Bernd On the Macaulayfication of local rings. (82c:13029)
- Die Wirkung lokaler Homomorphismen auf die Hilbertfunktion. (82i:13024)
- Hirschfeld, J. W. P. See Ceccherini, P. V., (82c:12021)
- Hovanskii, A. G. Newton polyhedra and the Euler-Jacobi formula. (Russian) (82g:32015)
- Sur les racines complexes des systèmes d'équations algébriques comportant peu de termes. (English summary) (82c:32024)
- Kawamata, Yujiro On singularities in the classification theory of algebraic varieties. (82f:14003)
- Kiyek, Karl-Heinz Anwendung von Ideal-Transformationen. (English summary) (82f:13008)
- Moroianu, Mihnea Un critère de contractibilité algébrique. (Italian summary) (82h:14013)
- Schenzel, Peter See Achilles, Rüdiger; et al., (82i:13018)
- Vogel, Wolfgang See Achilles, Rüdiger; et al., (82i:13018)

14E20 Coverings, fundamental group

- Bruce, J. W. On the fundamental group of the complement of a projective hypersurface. 82c:14009
- Fulton, William (with Hansen, Johan) A connectedness theorem for projective varieties, with applications to intersections and singularities of mappings. 82c:14010
- Gurjar, R. V. Affine varieties dominated by C^2 . 82b:14008
- Hansen, Johan See Fulton, William, 82c:14010
- Harbater, David Deformation theory and the tame fundamental group. 82f:14014
- Miyajima, Masayoshi p -cyclic coverings of the affine space. 82c:14015

secondary classifications:

- Efroymsen, Gustave A. The Riemann mapping theorem for planar Nash rings. (82j:30068)

14E22 Ramification problems [See also 12B10.]

secondary classifications:

- Chiari, Nadia Characterizations of certain singularities of a branched covering. (82g:14004)
- Fulton, William (with Hansen, Johan) A connectedness theorem for projective varieties, with applications to intersections and singularities of mappings. (82c:14010)
- Hansen, Johan See Fulton, William, (82c:14010)
- Kawamata, Yujiro (with Viehweg, Eckart) On a characterization of an abelian variety in the classification theory of algebraic varieties. (82c:14028)
- Viehweg, Eckart See Kawamata, Yujiro, (82c:14028)

14E25 Imbeddings

secondary classifications:

- Holme, Audun Embedding obstruction for smooth, projective varieties. I. (82f:14054)

14E30 Minimal models

secondary classifications:

- Lang, William E. A short proof of Castelnuovo's criterion of rationality. (82m:14018)
- Morrison, David R. Semistable degenerations of Enriques' and hyperelliptic surfaces. (82m:14026)

14E35 Results in dimension ≤ 3

secondary classifications:

- Yoshida, Ken-ichi Polynomial rings which are simple birational extensions over $k[X, Y]$. (82m:14005)

14E40 Local structure of maps: étale, flat, etc. [See also 13-XX, 14B25.]

- Shiota, Masahiro Sur la factoriabilité de l'anneau des fonctions lisses rationnelles. (English summary) 82h:14009

secondary classifications:

- Morris, Robert A. (with Wang, Stuart Sui Sheng) A Jacobian criterion for smoothness. (82j:14004)
- Szpircglas, A. Platitude des revêtements ramifiés. (82f:32041)
- Wang, Stuart Sui Sheng See Morris, Robert A., (82j:14004)

14E99 None of the above, but in this section

secondary classifications:

- Fujita, Takao On Kähler fiber spaces over curves. (82h:32024)

14Fxx Cohomology theory [See also 13Dxx.]

14F05 Vector bundles, sheaves, related constructions [See also 18F20, 46M20.]

- Akimoto, Yoshitaka On the stable vector bundles of rank 2 on P_C^2 . 82b:14010
- Andersen, Henning Haahr Representations of algebraic groups via cohomology of line bundles. (See 82c:00012)
- Atiyah, Michael F. (with Bott, Raoul) Yang-Mills and bundles over algebraic curves. 82c:14021
- Barth, Wolf Paul Kummer surfaces associated with the Horrocks-Mumford bundle. 82c:14022
- Counting singularities of quadratic forms on vector bundles. 82c:14016
- Beilinson, Alexandre (with Bernstein, I. N.) Localisation de g -modules. (English summary) 82c:14015
- Bernstein, I. N. See Beilinson, Alexandre, 82c:14015
- Bott, Raoul Morse theory and the Yang-Mills equations. 82d:14009
- See also Atiyah, Michael F., 82c:14021
- Brun, Jérôme Les fibrés de rang deux sur P_2 et leurs sections. (English summary) 82c:14015
- Daoudi, Mohammed Fibrés biuniformes sur $P_2(C)$. 82g:14019a
- Dubek, Helga Self-dual connections and holomorphic bundles. (See 82j:53062)
- Drezet, Jean-Marc Fibrés uniformes de type $(1, 0, \dots, 0, -1)$ sur P_2 . (English summary) 82j:14010
- Fibrés uniformes de type $(0, \dots, 0, -1, \dots, -1)$ sur P_2 . 82j:14011
- Ein, Lawrence Stable vector bundles on projective spaces in char $p > 0$. 82d:14010
- Elia, P. Des fibrés uniformes non homogènes et indécomposables de rang $(2n+1)$ sur $P^n(C)$, $n \geq 3$. 82g:14019b
- Ellingsrud, Geir (with Strømme, Stein Arild) Stable rank-2 vector bundles on P^3 with $c_1 = 0$ and $c_2 = 3$. 82c:14023
- Faltings, Gerd Formale Geometrie und homogene Räume. 82m:14006
- Fulton, William (with Johnson, Kent) Canonical classes on singular varieties. 82c:14017
- (with Lazarsfeld, R.) On the connectedness of degeneracy loci and special divisors. 82c:14016
- Hartshorne, Robin Four years of algebraic vector bundles: 1975–1979. 82c:14024
- Stable reflexive sheaves. 82b:14011
- Hoppe, Hans Jürgen (with Spindler, Heinz) Modulräume stabiler 2-Bündel auf Regelflächen. 82c:14018
- Hulek, Klaus On the classification of stable rank- r vector bundles over the projective plane. 82b:14012
- Iori, Samuel A. The self-intersection formula for flag bundles. (Italian summary) 82c:14017
- Johnson, Kent See Fulton, William, 82c:14017
- Kleinert, Werner Stable rank 2-vector bundles on the projective 3-space, their moduli, and the classification of instantons. (See 82j:53062)
- Kriever, I. M. (with Novikov, S. P.) Holomorphic bundles and nonlinear equations. Finite-gap solutions of rank 2. (Russian) 82j:14012
- Lange, Herbert Invertierbare Untergarben maximalen Grades von Rang-2 Vektorbündeln auf der projektiven Ebene. 82c:14019
- Correction and remark to: "On stable and uniform rank-2 vector bundles on P^2 in characteristic p " [Manuscripta Math. 29 (1979), no. 1, 11–28; MR 80i:14005]. 82c:14025
- Lazarsfeld, R. See Fulton, William, 82c:14016
- Le Potier, J. Stabilité et amplitude sur $P_2(C)$. 82b:14013
- Mulase, M. Instantons and line geometry. 82f:14016
- Müller, Werner Classification of instantons over S^4 (according to Drinfeld and Manin). (See 82j:53062)
- Newstead, P. E. Correction to: "Rationality of moduli spaces of stable bundles" [Math. Ann. 215 (1975), 251–268; MR 54 #7468]. 82d:14011
- Comparison theorems for conic bundles. 82g:14020
- Novikov, S. P. See Kriever, I. M., 82j:14012
- Penkov, I. B. The Penrose transform on general Grassmannians. 82j:14013
- Raghunathan, M. S. Principal bundles on affine space. 82g:14021
- Ramanan, S. Orthogonal and spin bundles over hyperelliptic curves. 82g:14022
- Reid, Miles Bogomolov's theorem $c_1^2 \leq 4c_2$. 82b:14014
- Schneider, Michael Einschränkung stabiler Vektorraumbündel vom Rang 3 auf Hyperbenen des projektiven Raumes. 82j:14014
- Spindler, Heinz Ein Satz über die Einschränkung holomorpher Vektorbündel auf P_2 mit $c_1 = 0$ auf Hyperbenen. [A theorem on the restriction of holomorphic vector bundles on P_2 with $c_1 = 0$ to hyperplanes] 82m:14007
- Die Modulräume stabiler 3-Bündel auf P_3 mit den Chernklassen $c_1 = 0$, $c_2 = c_3^2 - c_2$. 82g:14023
- See also Hoppe, Hans Jürgen, 82c:14018
- Strømme, Stein Arild See Ellingsrud, Geir, 82c:14023
- Szpiro, L. Le théorème de la régularité de l'adjointe de Gorenstein à Kodaira. 82c:14020
- Tjurin, A. N. Geometry of singularities of a general quadratic form. (Russian) 82b:14015
- Trautmann, Günther Zur Berechnung von Yang-Mills Potentialen durch holomorphe Vektorbündel. 82f:14017
- Van de Ven, A. Twenty years of classifying algebraic vector bundles. 82c:14026
- Varley, Robert Vector bundles on cones over projective schemes. 82j:14015
- Zink, Thomas Über die Klassifikation der Instantonenbündel über S^4 nach W. G. Drinfeld und J. I. Manin. (See 82j:53062)

secondary classifications:

- Andersen, Henning Haahr On the structure of Weyl modules. (82c:20051)
- Atiyah, Michael F. (with Hitchin, N. J.; Drinfel'd, V. G.; Manin, Ju. I.) Construction of instantons. (82g:81049)
- Bănică, Constantin (with Putinar, Mihai; Schumacher, Georg) Variation der globalen Ext in Deformationen kompakter komplexer Räume. (82c:32015)

- Barth, Wolf Paul Algebraische Vektorbündel. (82j:14001)
- Beltrametti, Mauro (with Palleschi, Marino) On the vanishing of certain cohomology groups of a normal variety. (Italian. English summary) (82m:14023)
- (Bogomolov, F. A.) See Martin-Deschamps, Mireille, (82c:14045)
- Boratyński, Maksymilian Representing subschemes as schemes of zeros of a section of a vector bundle. (82c:14061)
- Bott, Raoul An equivariant setting of the Morse theory. (82c:57020)
- Bruns, Winfried (with Evans, E. Graham, Jr.; Griffith, Phillip A.) Syzygies, ideals of height two, and vector bundles. (82c:13009)
- Drinfel'd, V. G. See Atiyah, Michael F.; et al., (82g:81049)
- Evans, E. Graham, Jr. See Bruns, Winfried; et al., (82c:13009)
- Faltings, Gerd Algebraisation of some formal vector bundles. (82c:14011)
- Griffith, Phillip A. See Bruns, Winfried; et al., (82c:13009)
- Gupta, Surender K. (with Murthy, M. Pavaman) ★Suslin's work on linear groups over polynomial rings and Serre problem. (82j:13009)
- Gurjar, R. V. Affine varieties dominated by C^2 . (82b:14008)
- Hiller, Howard L. Schubert calculus of a Coxeter group. (82m:14031)
- Hitchin, N. J. See Atiyah, Michael F.; et al., (82g:81049)
- Kazhdan, David (with Lusztig, George) A topological approach to Springer's representations. (82f:20076)
- Kimelfel'd, B. N. See Vinberg, E. A., (82c:32042)
- Kriever, I. M. An analogue of the d'Alembert formula for the equations of a principal chiral field and the sine-Gordon equation. (Russian) (82c:35095)
- The Baxter equations and algebraic geometry. (Russian) (82j:82024)
- Lusztig, George See Kazhdan, David, (82f:20076)
- Maijuta, Ju. M. Instantons and moduli schemes. (Russian. English summary) (82c:81087)
- Manin, Ju. I. See Atiyah, Michael F.; et al., (82g:81049)
- Martin-Deschamps, Mireille Courbes de genre géométrique borné sur une surface de type général [d'après F. A. Bogomolov]. (82c:14045)
- Maruyama, Masaki Moduli of stable sheaves. II. (82b:14011)
- The theorem of Grauert-Mülich-Spindler. (82b:14012)
- McCarthy, Patrick J. Explicit non- t Hooft rational solutions of the Atiyah-Drinfel'd-Hitchin-Manin instanton matrix equations for $SU(2r)$. (82c:81056)
- Murthy, M. Pavaman See Gupta, Surender K., (82j:13009)
- Novikov, S. P. Bloch functions in the magnetic field and vector bundles. Typical dispersion relations and their quantum numbers. (Russian) (82b:81111)
- Palleschi, Marino See Beltrametti, Mauro, (82m:14023)
- Pranger, Walter Riemann surfaces and bounded holomorphic functions. (82i:30067)
- Prasad, M. K. (with Sinha, A.; Wang, Ling Lie Chau) Systematic framework for generating multimonomole solutions. (82c:81058)
- Putinar, Mihai See Bănică, Constantin; et al., (82c:32015)
- Sacchiero, Gianni Normal bundles of rational curves in projective space. (Italian. English summary) (82j:14033)
- Schumacher, Georg See Bănică, Constantin; et al., (82c:32015)
- Sinha, A. See Prasad, M. K.; et al., (82c:81058)
- Tognoli, Alberto ★Algebraic geometry and Nash functions. (82g:14029)
- Umemura, Hiroshi On a property of symmetric products of a curve of genus 2. (82c:14025)
- Vinberg, E. A. (with Kimelfel'd, B. N.) Homogeneous domains on flag manifolds and spherical subsets of semisimple Lie groups. (Russian) (82c:32042)
- Wang, Ling Lie Chau See Prasad, M. K.; et al., (82c:81058)
- Ward, Richard Samuel Ansätze for self-dual Yang-Mills fields. (82m:81059)
- Kagel ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)
- Proceedings:
- Summer School on Yang-Mills Equations ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)
- Summer School:
- Yang-Mills Equations ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)
- Yang-Mills equations ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)
- 14F07 Weierstrass points in one and several variables; gap sheaves
- Takigawa, Nobumasa Weierstrass points on compact Riemann surfaces with nontrivial automorphisms. 82f:14018
- secondary classifications:
- Guerrero, Ignacio Automorphisms of compact Riemann surfaces and Weierstrass points. (82j:14027)
- Lauffer, Henry B. On generalized Weierstrass points and rings with no prime elements. (82m:32020)
- Lax, Robert F. Gap sequences and moduli in genus 4. (82a:32030)
- Takigawa, Nobumasa Weierstrass points and the vector of Riemann constants. (Japanese summary) (82a:14019)
- 14F10 Differentials and other special sheaves
- Stepanenko, V. A. Description of rational differential forms on a product of projective spaces. (Russian) 82c:14011
- secondary classifications:
- Geller, Susan C. (with Roberts, Leslie G.) Kahler differentials and excision for curves. (82d:14012)
- Gunning, R. C. On the period classes of Prym differentials. I. (82f:14037)
- Miyaoka, Yoichi On the Mumford-Ramanujam vanishing theorem on a surface. (82i:14012)
- Platte, Erich Pure descent for the module of Zariski differentials. (82c:14008)
- Roberts, Leslie G. See Geller, Susan C., (82d:14012)

14F12 Riemann-Roch problems [See mainly 14C40, also 32L10, 57R20.]

- Baum, Paul (with Fulton, William; MacPherson, Robert) Riemann-Roch and topological K theory for singular varieties. **82c:14021**
 (with Fulton, William; Quart, George) Lefschetz-Riemann-Roch for singular varieties. **82c:14022a**
 Fulton, William See Baum, Paul; et al., **82c:14021** and **82c:14022a**
 MacPherson, Robert See Baum, Paul; et al., **82c:14021**
 Miyaoka, Yoichi On the Mumford-Ramanujan vanishing theorem on a surface. **82i:14012**
 Moonen, Boudewijn ★Das Lefschetz-Riemann-Roch-Theorem für singuläre Varietäten. (German) [The Lefschetz-Riemann-Roch theorem for singular varieties] **82b:14015**
 Piene, Ragni (with Ronga, Felice) A geometric approach to the arithmetic genus of a projective manifold of dimension three. **82c:14027**
 Quart, George Localization theorem in K -theory for singular varieties. **82c:14022b**
 See also Baum, Paul; et al., **82c:14022a**
 Ronga, Felice See Piene, Ragni, **82c:14027**
 Šhtman, V. V. The Riemann-Roch theorem and the Atiyah-Hirzebruch spectral sequence. (Russian) **82c:14028**

secondary classifications:

- Matsusaka, Teruhisa On some cohomology groups of invertible sheaves. (**82a:14013**)
 On polarized varieties of dimension 3. II. (**82j:14008**)
 O'Brian, Nigel R. (with Toledo, Domingo; Tong, Yue Lin L.) Grothendieck-Riemann-Roch for complex manifolds. (**82m:32011**)
 Toledo, Domingo See O'Brian, Nigel R.; et al., (**82m:32011**)
 Tong, Yue Lin L. See O'Brian, Nigel R.; et al., (**82m:32011**)

14F15 Serre cohomology, K -theory [See also 13D15, 18F25.]

- Bloch, Spencer Torsion algebraic cycles, K_2 , and Brauer groups of function fields. **82c:14018**
 Geller, Susan C. (with Roberts, Leslie G.) Kahler differentials and excision for curves. **82d:14012**
 Roberts, Leslie G. See Geller, Susan C., **82d:14012**

secondary classifications:

- Almkvist, Gert Erratum: " K -theory of endomorphisms" [J. Algebra **55** (1978), no. 2, 308-340; MR **80i:18018**]. (**82b:18008**)
 Baclawski, Kenneth The Möbius algebra as a Grothendieck ring. (**82k:18002**)
 Bloch, Spencer Applications of the dilogarithm function in algebraic K -theory and algebraic geometry. (**82f:14009**)
 Ferrarese, Giorgio The second cohomology group of the sheaf of invertible functions of the theta divisor of a curve of genus 4. (Italian. English summary) (**82k:14031**)
 Friedlander, Eric M. Étale K -theory. I. Connections with étale cohomology and algebraic vector bundles. (**82c:14029**)
 Hiller, Howard L. λ -rings and algebraic K -theory. (**82c:18016**)
 Palleschi, Marino Remarks on the vanishing of the first irregularity index of a divisor. (Italian. English summary) (**82h:14005**)
 Sherman, Clayton Cartan maps, clean rings, and unique factorization. (**82h:13010**)
 Sugawara, Tamio Matrices giving relations among symmetric functions. (**82j:05009**)
 Varley, Robert Vector bundles on cones over projective schemes. (**82j:14015**)

14F20 Grothendieck cohomology and topology [See also 18F10.]

- Coste, Michel (with Michon, Gérard) Petits et gros topos en géométrie algébrique. **82g:14024**
 (with Coste-Roy, Marie-Françoise) Le topos étale réel d'un anneau. **82h:14016**
 Coste-Roy, Marie-Françoise See Coste, Michel, **82h:14016**
 Friedlander, Eric M. Étale K -theory. I. Connections with étale cohomology and algebraic vector bundles. **82c:14029**
 (with Parshall, Brian) Étale cohomology of reductive groups. **82m:14008**
 Laumon, Gérard Comparaison de caractéristiques d'Euler-Poincaré en cohomologie ℓ -adique. (English summary) **82c:14030**
 Lee, Heisook Birational invariance of cohomological Brauer group. **82j:14016**
 Michon, Gérard See Coste, Michel, **82g:14024**
 Parshall, Brian See Friedlander, Eric M., **82m:14008**
 Tamme, Günter ★Einführung in die étale Kohomologie. (German) [Introduction to étale cohomology] **82j:14017**

secondary classifications:

- Duskin, J. Higher-dimensional torsors and the cohomology of topoi: the abelian theory. (**82c:18006**)
 Lavedhomme, R. (with Roisin, J.-R.) Note on nonabelian cohomology. (**82k:18005**)
 Paré, Robert Indexed categories and generated topologies. (**82c:18008**)
 Radu, Alexandru Gh. ★Teoria toposurilor. Vol. I. (Romanian) [Theory of topoi. Vol. I] (**82j:18001**)
 Roisin, J.-R. See Lavedhomme, R., (**82k:18005**)

14F25 Classical real and complex cohomology

- Schiemann, Günther Die Homologiegruppen singularitätenfreier algebraischer Hyperflächen. **82a:14005**

secondary classifications:

- Delfs, Hans (with Knebusch, Manfred) Semialgebraic topology over a real closed field. I. Paths and components in the set of rational points of an algebraic variety. (**82m:14010**)
 Hovanskii, A. G. A class of systems of transcendental equations. (Russian) (**82a:14006**)

Knebusch, Manfred See Delfs, Hans, (**82m:14010**)

14F30 p -adic cohomology, crystalline cohomology

- Illusie, Luc Complexe de de Rham-Witt et cohomologie cristalline. **82d:14013**
 Nygaard, Niels O. Higher de Rham-Witt complexes of supersingular $K3$ surfaces. **82d:14014**

secondary classifications:

- Berthelot, Pierre (with Messing, William) Théorie de Dieudonné cristalline. I. (**82f:14041**)
 Théorie de Dieudonné sur un anneau de valuation parfait. (**82b:14026**)
 Laffaille, Guy Groupes p -divisibles et modules filtrés: le cas peu ramifié. (English summary) (**82f:14028**)
 Lang, William E. A short proof of Castelnuovo's criterion of rationality. (**82m:14018**)
 Messing, William See Berthelot, Pierre, (**82f:14041**)
 Newman, Kenneth (with Sweedler, Moss E.) A realization of the additive Witt group. (**82g:16016**)
 Sweedler, Moss E. See Newman, Kenneth, (**82g:16016**)

14F35 Homotopy theory

secondary classifications:

- Edwards, David A. (with Hastings, Harold M.) Čech theory: its past, present, and future. (**82h:55010**)
 Félix, Yves Dénombrement des types de K -homotopie théorie de la déformation. (English summary) (**82i:55011**)
 Friedlander, Eric M. Étale K -theory. I. Connections with étale cohomology and algebraic vector bundles. (**82c:14029**)
 Hastings, Harold M. See Edwards, David A., (**82h:55010**)
 Jardine, J. F. Algebraic homotopy theory. (**82j:55014**)
 Kas, A. On the handlebody decomposition associated to a Lefschetz fibration. (**82f:57012**)

14F40 de Rham cohomology [See also 14C30, 32C35, 32L10.]

- Hoang Le Min' The de Rham cohomology of a weakly irregular differential system. (Russian) **82c:14031**
 Lang, William E. Two theorems on de Rham cohomology. **82d:14015**

secondary classifications:

- Terao, Hiroaki Forms with logarithmic pole and the filtration by the order of the pole. (**82h:14004**)
 Varčenko, A. N. Asymptotic Hodge structure on vanishing cohomology. (Russian) (**82m:32007**)

14F45 Topological properties

- Harlamov, V. M. Real algebraic surfaces. (Russian) **82c:14032**

secondary classifications:

- Faltings, Gerd Some theorems about formal functions. (**82h:14004**)
 Rohlin, V. A. New inequalities in the topology of real plane algebraic curves. (Russian) (**82c:14066**)

14F99 None of the above, but in this section

- Bočarov, A. V. The Spencer cohomology of affine algebraic varieties. (Russian) **82g:14025**

secondary classifications:

- Lønsted, Knud On the embedding of coverings into 1-dimensional bundles. (**82c:57010**)
 Lorenzani, Massimo (with Maschietti, Antonio) Algebraic and analytic local cohomology for affine schemes. (Italian summary) (**82k:14006**)
 Maschietti, Antonio See Lorenzani, Massimo, (**82k:14006**)
 Sullivan, John Brendan Frobenius operations on Hochschild cohomology. (**82c:20054**)

14Gxx Special ground fields, arithmetic problems [For complex multiplication, see 10D25, 14K22. For automorphic and modular functions and forms, see also 10Dxx, 14K15.]

14G05 Rationality questions

- Černousov, V. I. On the rationality of spinor varieties over the rational number field. (Russian. English summary) **82m:14009**
 Colliot-Thélène, Jean-Louis (with Sansuc, Jean-Jacques) La descente sur les variétés rationnelles. **82d:14016**
 Principe de Hasse pour certaines variétés rationnelles. **82j:14018**
 (with Coray, Daniel F.; Sansuc, Jean-Jacques) Descente et principe de Hasse pour certaines variétés rationnelles. **82f:14020**
 Coray, Daniel F. See Colliot-Thélène, Jean-Louis; et al., **82f:14020**
 Sansuc, Jean-Jacques See Colliot-Thélène, Jean-Louis, **82d:14016** and **82f:14020**

secondary classifications:

- Coray, Daniel F. On a problem of Pfister about intersections of three quadrics. (**82h:10021**)

- De Groote, R. (with Hirschfeld, J. W. P.) The number of points on an elliptic cubic curve over a finite field. (82a:10029)
 Hirschfeld, J. W. P. See De Groote, R., (82a:10029)
 Katz, Nicholas M. Galois properties of torsion points on abelian varieties. (82a:14025)
 Kenku, M. A. The modular curves $X_0(65)$ and $X_0(91)$ and rational isogeny. (82j:14035)
 Ogai, S. V. Rational points on algebraic curves. (Russian) (82j:14029)
 Silverman, Joseph H. Lower bound for the canonical height on elliptic curves. (82a:14043)

14G10 Zeta functions and related questions [See also 12A70, 12B30.]

- Gross, Benedict H. (with Zagier, Don) On the critical values of Hecke L -series. (82g:14026)
 Mazur, Barry On the arithmetic of special values of L functions. 82a:14033
 Zagier, Don See Gross, Benedict H., 82g:14026

secondary classifications:

- Bloch, Spencer ★Lectures on algebraic cycles. (82a:14012)
 Casselman, W. The Hasse-Weil ζ -function of some moduli varieties of dimension greater than one. (82a:10046)
 Gillard, Roland Unités elliptiques et fonctions L p -adiques. [Elliptic units and p -adic L functions] (See 82j:10004)
 Milne, J. S. Points on Shimura varieties mod p . (82a:10048)
 Mori, Shigefumi On Tate conjecture concerning endomorphisms of abelian varieties. (82a:14026)
 Ramakrishnan, Dinakar A regulator for curves via the Heisenberg group. (82m:12008)
 Yui, Noriko On the Jacobian variety of the Fermat curve. (82a:14016)

14G13 Weil-Tate conjectures [See also 14Cxx.]

- Ribet, Kenneth A. Sur les variétés abéliennes à multiplications réelles. (English summary) 82a:14021

secondary classifications:

- Friedlander, Eric M. Étale K -theory. I. Connections with étale cohomology and algebraic vector bundles. (82a:14029)
 Ribet, Kenneth A. Twists of modular forms and endomorphisms of abelian varieties. (82a:14043)
 Endomorphism algebras of abelian varieties attached to newforms of weight 2. (82a:10044)

14G15 Finite ground fields

- Swinerton-Dyer, H. P. F. Universal equivalence for cubic surfaces over finite and local fields. 82a:14019

secondary classifications:

- Moreno, Oscar Counting traces of powers over $\text{GF}(2^m)$. (82a:12024)

14G20 p -adic ground fields (local fields)

- Adolphson, Alan (with Sperber, Steven) Exponential sums on the complement of a hypersurface. 82a:14023
 Dwork, B. Hypergeometric functions as p -adic analytic functions. (See 82m:10006)
 Herrlich, Frank Endlich erzeugbare p -adische diskontinuierliche Gruppen. 82f:14022
 Jarden, Moshe (with Roquette, Peter) The Nullstellensatz over p -adically closed fields. 82g:14027
 Roquette, Peter See Jarden, Moshe, 82g:14027
 Sperber, Steven See Adolphson, Alan, 82a:14023

secondary classifications:

- Berthelot, Pierre Théorie de Dieudonné sur un anneau de valuation parfait. (82b:14026)
 Christol, Gilles Systèmes différentiels linéaires p -adiques, structure de Frobenius faible. (English summary) (82a:12027)
 Fontaine, Jean-Marie Modules galoisiens, modules filtrés et anneaux de Barsotti-Tate. (82a:14046)
 Gaglione, Anthony M. (with Waldinger, Hermann V.) A generalization of the bracketing process applied in the commutator calculus. (82b:20052)
 Gerritzen, Lothar On the space of Schottky-Mumford curves. (82k:14021)
 Zur analytischen Beschreibung des Raumes der Schottky-Mumford-Kurven. (82m:14014)
 Kanevskii, D. S. Morphisms of carcasses and of groups connected with cubic surfaces. (Russian) (82a:20000)
 Kurihara, Akira Construction of p -adic unit balls and the Hürzbruch proportionality. (82a:10054)
 Laffaille, Guy Groupes p -divisibles et modules filtrés: le cas peu ramifié. (English summary) (82a:14028)
 Robba, Philippe Lemmes de Hensel pour les opérateurs différentiels. Application à la réduction formelle des équations différentielles. (82a:12022)
 Swinerton-Dyer, H. P. F. Universal equivalence for cubic surfaces over finite and local fields. (82a:14019)
 Waldinger, Hermann V. See Gaglione, Anthony M., (82b:20052)
 Yu, Jing A cuspidal class number formula for the modular curves $X_1(N)$. (82b:10030)

14G25 Global ground fields

- Kramer, Kenneth Arithmetic of elliptic curves upon quadratic extension. 82g:14028

secondary classifications:

- Anderson, M. (with Masser, David W.) Lower bounds for heights on elliptic curves. (82g:10049)
 Avramov, Luchezar L. (with Herzog, Jürgen) The Koszul algebra of a codimension 2 embedding. (82g:13011)
 Benétou, Lucien Ordre minimum des boucles de Moufang commutatives de classe 2 [resp. 3]. (English summary) (82j:20129)
 Bertrand, Daniel See Waldschmidt, Michel, (82k:10041)
 Bremner, Andrew Pythagorean triangles and a quartic surface. (82a:10018)
 Casselman, W. The Hasse-Weil ζ -function of some moduli varieties of dimension greater than one. (82a:10046)
 Frey, Gerhard Cyclic isogenies and nonstandard arithmetic. (82a:14048)
 Fried, M. Exposition on an arithmetic-group theoretic connection via Riemann's existence theorem. (82j:12003)
 Herzog, Jürgen See Avramov, Luchezar L., (82g:13011)
 Hida, Haruzo On abelian varieties with complex multiplication as factors of the Jacobians of Shimura curves. (82k:10029)
 Holzapfel, Rolf-Peter ★Arithmetische Kugelquotientenflächen. (German) [Arithmetic spherical quotient surfaces] (82a:10030a)
 ★Arithmetische Kugelquotientenflächen. (German) [Arithmetic spherical quotient surfaces] (82a:10030b)
 ★Arithmetische Kugelquotientenflächen (Picardsche Modulflächen). (German) [Arithmetic spherical quotient surfaces (Picard modular surfaces)] (82a:10030c)
 Kenku, M. A. The modular curves $X_0(65)$ and $X_0(91)$ and rational isogeny. (82j:14035)
 Kozioł, Krzysztof The extensions of commutative Moufang loops of period 3. (Polish summary) (82a:20119)
 Langlands, Robert P. On the zeta functions of some simple Shimura varieties. (82k:10042)
 Lubin, Jonathan Canonicity of a cyclic subgroup of an elliptic curve. (82a:14032)
 Macintyre, Angus Nonstandard number theory. (82b:03071)
 Masser, David W. See Anderson, M., (82g:10049)
 Mazur, Barry On the arithmetic of special values of L functions. (82a:14033)
 See also Serre, Jean-Pierre, (82a:14049)
 Serre, Jean-Pierre Points rationnels des courbes modulaires $X_0(N)$ [d'après Barry Mazur]. (82a:14049)
 See also Waldschmidt, Michel, (82k:10041)
 Vvedenskii, O. M. The Artin effect in abelian varieties. II. (Russian) (82g:14042)
 Waldschmidt, Michel ★Nombres transcendants et groupes algébriques. (French) [Transcendental numbers and algebraic groups] (82k:10041)
 Yoshida, Hiroyuki Abelian varieties with complex multiplication and representations of the Weil groups. (82k:14044)

14G30 Real ground fields [See also 32C05. Must also be assigned at least one other number referring to the specific type of problem considered.]

- Colliot-Thélène, Jean-Louis (with Ischebeck, Friedrich) L'équivalence rationnelle sur les delfs de dimension zéro des variétés algébriques réelles. (English summary) 82j:14019
 Delfs, Hans (with Knebusch, Manfred) Semialgebraic topology over a real closed field. I. Paths and components in the set of rational points of an algebraic variety. 82m:14010
 (with Knebusch, Manfred) Semialgebraic topology over a real closed field. II. Basic theory of semialgebraic spaces. 82m:14011
 Hovanskii, A. G. A class of systems of transcendental equations. (Russian) 82a:14006
 Ischebeck, Friedrich See Colliot-Thélène, Jean-Louis, 82j:14019
 Knebusch, Manfred An algebraic proof of the Borsuk-Ulam theorem for polynomial mappings. 82m:14012
 See also Delfs, Hans, 82m:14010 and 82m:14011
 Tognoli, Alberto ★Algebraic geometry and Nash functions. 82g:14029

secondary classifications:

- A'Campo, Norbert Sur la première partie du seizième problème de Hilbert. (82g:14049)
 Akbulut, Selman (with King, Henry Churchill) A topological characterization of real algebraic varieties. (82a:57017)
 (with Taylor, Laurence R.) A topological resolution theorem. (82a:57018)
 Arnold, V. I. (with Oleinik, O. A.) Topology of real algebraic varieties. (Russian) (82a:14064)
 Colliot-Thélène, Jean-Louis Formes quadratiques multiplicatives et variétés algébriques: deux compléments. (German summary) (82g:10040)
 (Dostal, M. A.) See American Mathematical Society Translations, Ser. 2, (82a:00009)
 Efroyimov, Gustave A. The Riemann mapping theorem for planar Nash rings. (82j:30068)
 Gelfand, I. M. (with Graev, M. I.) Admissible n -dimensional complexes of curves in \mathbb{R}^n . (Russian) (82a:53103)
 Graev, M. I. See Gelfand, I. M., (82a:53103)
 Griffiths, Phillip A. (with Morgan, John W.) ★Rational homotopy theory and differential forms. (82m:55014)
 Hovanskii, A. G. Newton polyhedra and the Euler-Jacobi formula. (Russian) (82g:32015)
 King, Henry Churchill See Akbulut, Selman, (82a:57017)
 Kulkarni, Ravindra S. (with Shalen, Peter B.) A note on real cubic surfaces. (82a:57003)
 Mahé, Louis Séparation des composantes réelles par les signatures d'espaces quadratiques. (English summary) (82a:10037)
 Morgan, John W. See Griffiths, Phillip A., (82m:55014)
 Natanzon, S. M. Spaces of moduli of real curves. (Russian) (82d:14018)
 Oleinik, O. A. See Arnold, V. I., (82a:14064)
 Rohlin, V. A. New inequalities in the topology of real plane algebraic curves. (Russian) (82a:14066)
 Shalen, Peter B. See Kulkarni, Ravindra S., (82a:57003)
 Taylor, Laurence R. See Akbulut, Selman, (82a:57018)

(Tretkoff, Marvin D.) See American Mathematical Society Translations, Ser. 2. (82a:00009)

Viro, O. Ja. Curves of degree 7, curves of degree 8 and the Ragsdale conjecture. (Russian) (82e:14067)

American Mathematical Society Translations, Ser. 2 ★American Mathematical Society Translations, Ser. 2, Vol. 112. (82a:00009)

Hilbert's sixteenth problem ★American Mathematical Society Translations, Ser. 2, Vol. 112. (82a:00009)

14G99 None of the above, but in this section

Šokurov, V. V. A study of the homology of Kuga varieties. (Russian) 82f:14023

secondary classifications:

Kulkarni, Ravindra S. Compact surfaces as complete intersections. (82d:57004)

14Hxx Curves

(Mohan, Kumar N.) See Szpiro, L., 82d:14017

Szpiro, L. ★Lectures on equations defining space curves. 82d:14017

14H05 Algebraic functions [See also 14K20, 32G20.]

Horiuchi, Ryutaro On the existence of meromorphic functions with certain lower order on nonhyperelliptic Riemann surfaces. 82i:14013

Martens, G. Funktionen von vorgegebener Ordnung auf komplexen Kurven. 82e:14034

Moh, T. T. On the bound for the Defranchis-Severi theorem. 82g:14030

secondary classifications:

Clemens, Charles Herbert ★A scrapbook of complex curve theory. (82i:14001)

Gross, Benedict H. The annihilation of divisor classes in abelian extensions of the rational function field. (See 82m:10006)

Tagikawa, Nobumasa Weierstrass points on compact Riemann surfaces with nontrivial automorphisms. (82f:14018)

14H10 Families, moduli (algebraic)

Arbarello, Enrico (with Harris, Joseph Daniel) Canonical curves and quadrics of rank 4. 82k:14020

Chang, Hai Ch'ao Deformation of quintic plane curves. 82j:14020

Edge, W. L. A pencil of specialized canonical curves. 82m:14013

Gerritzen, Lothar On the space of Schottky-Mumford curves. 82k:14021

Ghione, Franco (with Sacchiero, Gianni) Normal bundles of rational curves in P^3 . 82b:14016

Harris, Joseph Daniel See Arbarello, Enrico, 82k:14020

Homma, Masaaki On projective normality and defining equations of a projective curve of genus three embedded by a complete linear system. 82k:14022

Kempf, George R. Deformations of symmetric products. 82k:14023

Natanzon, S. M. Spaces of moduli of real curves. (Russian) 82d:14018

Oort, Frans (with Steenbrink, Joseph) The local Torelli problem for algebraic curves. 82i:14014

Coarse and fine moduli spaces of algebraic curves and polarized abelian varieties. 82j:14021

Sacchiero, Gianni See Ghione, Franco, 82b:14016

Steenbrink, Joseph See Oort, Frans, 82i:14014

Tannebaum, Allen Deformations of space curves. 82k:14024

Tannenbaum, Allen Families of algebraic curves with nodes. 82b:14017

Castelnuovo curves and unobstructed deformations. 82f:14024

secondary classifications:

Arbarello, Enrico (with Cornalba, Maurizio) On a conjecture of Petri. (Italian) (82k:14029)

Cornalba, Maurizio See Arbarello, Enrico, (82k:14029)

Kurihara, Akira Construction of p -adic unit balls and the Hirzebruch proportionality. (82e:10054)

Lanteri, Antonio On a theorem of Chisini. (Italian. English summary) (83j:14023)

Lax, Robert F. Gap sequences and moduli in genus 4. (82a:32030)

14H15 Families, moduli (analytic) [See also 30F10, 32G15, 32G20.]

Cohen, Jeffrey Mitchell Families of compact Riemann surfaces with automorphism groups. 82g:14031

Gerritzen, Lothar Zur analytischen Beschreibung des Raumes der

Schottky-Mumford-Kurven. 82m:14014

Hwang Ma, Shu Yin Periods of iterated integrals of holomorphic forms on a compact Riemann surface. 82k:14025

van der Put, Marius Schottky groups and Schottky curves. 82a:14007

secondary classifications:

Bers, Lipman Finite-dimensional Teichmüller spaces and generalizations. (82k:32050)

Carlson, James A. Extensions of mixed Hodge structures. (82g:14013)

Kato, Takao On Weierstrass points whose first nongaps are three. (82f:30046)

Keen, Linda On hyperelliptic Schottky groups. (82a:32029)

Kuriyayashi, Akikazu A generalization of λ function. (82e:30062)

Lax, Robert F. Multiples of Weierstrass points as special divisors. (82d:32014)

Namba, Makoto ★Families of meromorphic functions on compact Riemann surfaces. (82i:32046)

Washburn, Sherwood On the moduli of plane curve singularities. II. The versal E -deformation in the case of a single characteristic pair. (82k:14026)

14H20 Singularities, local rings [See also 13Hxx.]

Brown, William C. A differential characterization of multiplicity sequences over arbitrary fields. 82k:14017

Bruce, J. W. (with Giblin, P. J.) A stratification of the space of plane quartic curves. 82j:14022

Fulton, William On the fundamental group of the complement of a node curve. 82e:14035

Ganong, Richard On plane curves with one place at infinity. 82e:14036

(Geramita, Anthony V.) See Seminar: Queen's, Curves, 82m:14015

Giblin, P. J. See Bruce, J. W., 82j:14022

Lanteri, Antonio On a theorem of Chisini. (Italian. English summary) 82j:14023

Orecchia, Ferruccio Algebraic curves with ordinary points. (See 82m:14015)

Points in generic position and conductors of curves with ordinary singularities. 82j:14024

Washburn, Sherwood On the moduli of plane curve singularities. II. The versal

E -deformation in the case of a single characteristic pair. 82k:14026

Kingston, Ont. ★The Curves Seminar at Queen's. Vol. I. 82m:14015

Seminar:

Queen's, Curves ★The Curves Seminar at Queen's. Vol. I. 82m:14015

secondary classifications:

(Demazure, Michel) See Seminar: Singularities of Surfaces, (82d:14021)

Geramita, Anthony V. (with Orecchia, Ferruccio) On the Cohen-Macaulay type of s lines in A^{n+1} . (82g:13018)

Hirschowitz, A. Sur la postulation générale des courbes rationnelles. (82j:14028)

Hwang Ma, Shu Yin Periods of iterated integrals of holomorphic forms on a compact Riemann surface. (82k:14025)

Itaka, Shigeru The virtual singularity theorem and the logarithmic bigenus theorem. (82b:14022)

Orecchia, Ferruccio See Geramita, Anthony V., (82g:13018)

(Pinkham, Henry Charles) See Seminar: Singularities of Surfaces, (82d:14021)

(Teissier, Bernard) See Seminar: Singularities of Surfaces, (82d:14021)

Ulrich, Bernd Torsion des Differentialmoduls und Kotangentenmodul von Kurvensingularitäten. [Torsion of the differential module and cotangent module of curve singularities] (82j:13018)

Palaiseau ★Séminaire sur les Singularités des Surfaces. (French) [Seminar on the Singularities of Surfaces] (82d:14021)

Seminar:

Singularities of Surfaces ★Séminaire sur les Singularités des Surfaces. (French)

[Seminar on the Singularities of Surfaces] (82d:14021)

Singularities of surfaces ★Séminaire sur les Singularités des Surfaces. (French) [Seminar on the Singularities of Surfaces] (82d:14021)

on the Singularities of Surfaces] (82d:14021)

14H25 Arithmetic ground fields [See also 10Bxx, 14Gxx.]

van der Put, Marius The class group of a one-dimensional affinoid space. 82h:14018

Stuhler, Ulrich On the connection between Brauer group and Tate-Shafarevich group. 82k:14027

secondary classifications:

Dwork, B. Hypergeometric functions as p -adic analytic functions. (See 82m:10006)

Friedel, Karl-Heinz Zariski's Main Theorem für affinoid Kurven. (82b:32044)

Friesel, M. Exposition on an arithmetic-group theoretic connection via Riemann's existence theorem. (82j:12003)

Gerritzen, Lothar (with van der Put, Marius) ★Schottky groups and Mumford curves. (82j:10053)

van der Put, Marius See Gerritzen, Lothar, (82j:10053)

14H30 Coverings, fundamental group

Chetiya, B. P. On genuses of compact Riemann surfaces admitting solvable automorphism groups. 82k:14028

Homma, Masaaki Automorphisms of prime order of curves. 82e:14024

Kawai, Sōichi On finite ramified covering spaces of P^n . 82k:14019

Shiba, Masakazu Analytic mappings of a Riemann surface of finite type into a torus. 82f:14025

secondary classifications:

Bruce, J. W. On the fundamental group of the complement of a projective hypersurface. (82i:14009)

Harbater, David Moduli of p -covers of curves. (82f:14010)

Deformation theory and the tame fundamental group. (82f:14014)

Hubbard, John H. The monodromy of projective structures. (82k:14009)

Mednyh, A. D. Riemann surfaces with a cyclic group of automorphisms. (Russian) (82h:30049)

Prill, David Primitive holomorphic maps of curves. (82a:30056)

Wagreich, Philip Automorphic forms and singularities with C^* -action. (82m:10045)

14H35 Correspondences [See also 14Exx.]

Ciliberto, Ciro On systems of correspondences of an algebraic curve with general moduli with itself. (Italian. English summary) 82a:14006

Pohljah, A. K. Construction of a subgroup of the group of divisors of degree zero on a curve of genus two. (Russian) 82g:14032

secondary classifications:

- Eisenbud, David Transcendental embeddings of hyperelliptic curves. (82f:14027)
 Griffiths, Phillip A. ★An introduction to the theory of special divisors on algebraic curves. (82j:14025)

14H40 Jacobians [See also 32G20.]

- Arbarello, Enrico (with Cornalba, Maurizio) On a conjecture of Petri. (Italian) 82k:14029
 Cornalba, Maurizio See Arbarello, Enrico, 82k:14029
 Donagi, Ron (with Smith, Roy Campbell) The degree of the Prym map onto the moduli space of five-dimensional abelian varieties. 82k:14030a
 (with Smith, Roy Campbell) The structure of the Prym map. 82k:14030b
 The tetragonal construction. 82a:14009
 Ferrarese, Giorgio The second cohomology group of the sheaf of invertible functions of the theta divisor of a curve of genus 4. (Italian. English summary) 82k:14031
 Griffiths, Phillip A. ★An introduction to the theory of special divisors on algebraic curves. 82j:14025
 Kempf, George R. Toward the inversion of abelian integrals. II. 82a:14010b
 Toward the inversion of abelian integrals. I. 82a:14010a
 Lin, Fu Lai On cyclic automorphism groups of Riemann surfaces and theta functions. 82j:14026
 Sekiguchi, Tsutomu The coincidence of fields of moduli for nonhyperelliptic curves and for their Jacobian varieties. 82k:14020
 Smith, Roy Campbell See Donagi, Ron, 82k:14030
 Umemura, Hiroshi On a property of symmetric products of a curve of genus 2. 82a:14025
 Viljamaa, Matti On the structure of generalized Jacobian varieties. 82f:14026

secondary classifications:

- Bott, Raoul Equivariant Morse theory and the Yang-Mills equation of Riemann surfaces. (82c:58035)
 Farkas, Hershel M. Vanishing theta constants. (82j:14037)
 Fulton, William (with Lazarsfeld, R.) On the connectedness of degeneracy loci and special divisors. (82k:14016)
 Kani, Ernst Eine Verallgemeinerung des Satzes von Castelnuovo-Severi. (82m:14017)
 Lazarsfeld, R. See Fulton, William, (82k:14016)
 McKean, H. P. Boussinesq's equation on the circle. (82j:58063)
 Mukai, Shigeru Duality between $D(X)$ and $D(X)$ with its application to Picard sheaves. (82f:14036)
 Ran, Ziv On subvarieties of abelian varieties. (82a:14024)
 Sekiguchi, Tsutomu On the fields of rationality for curves and for abelian varieties. (82c:14027)

14H45 Special curves

- Bosch, Siegfried Formelle Standardmodelle hyperelliptischer Kurven. 82b:14018
 Cammaroto, Filippo On the prime and irreducible elements of the coordinate ring of a conic. (Italian. English summary) 82k:14021
 Eisenbud, David Transcendental embeddings of hyperelliptic curves. 82f:14027
 Guerrero, Ignacio Automorphisms of compact Riemann surfaces and Weierstrass points. 82j:14027
 Hirschowitz, A. Sur la postulation générale des courbes rationnelles. 82j:14028
 Kuribayashi, Akikazu (with Kuribayashi, Izumi) On a lemma of K. Komiyu. 82a:14015
 Kuribayashi, Izumi See Kuribayashi, Akikazu, 82a:14015
 McKean, H. P. Theta functions, solitons, and singular curves. 82f:14028
 Natanzon, S. M. The order of a finite group of homeomorphisms of a surface onto itself, and the number of real forms of a complex algebraic curve. (Russian) 82b:14019
 Ogai, S. V. Rational points on algebraic curves. (Russian) 82j:14029
 Sacchiero, Gianni Normal bundles of rational curves in projective space. (Italian. English summary) 82g:14033
 Yoshihara, Hisao Applications of Plücker's formula. (Japanese) 82k:14032
 Yui, Noriko On the Jacobian variety of the Fermat curve. 82m:14016

secondary classifications:

- A'Campo, Norbert Sur la première partie du seizième problème de Hilbert. (82g:14049)
 Arbarello, Enrico (with Harris, Joseph Daniel) Canonical curves and quadrics of rank 4. (82k:14026)
 Gerritzen, Lothar Zur analytischen Beschreibung des Raumes der Schottky-Mumford-Kurven. (82m:14014)
 Goppa, V. D. Codes on algebraic curves. (Russian) (82k:94017)
 Harris, Joseph Daniel See Arbarello, Enrico, (82k:14026)
 Homma, Masaaki On projective normality and defining equations of a projective curve of genus three embedded by a complete linear system. (82k:14022)
 Krichever, I. M. Elliptic solutions of the Kadomtcev-Petviashvili equations, and integrable systems of particles. (Russian) (82c:58046)
 McKean, H. P. Units of Hill curves. (82f:58046)
 Natanzon, S. M. Automorphisms of the Riemann surface of an M -curve. (Russian) (82b:14020)
 Tannebaum, Allen Deformations of space curves. (82k:14024)

14H99 None of the above, but in this section

- Gómez-Mont, Xavier Differentials on hyperelliptic curves. 82k:14016
 Komiyu, Kaname See Kuribayashi, Akikazu, 82a:14017
 Kuribayashi, Akikazu (with Komiyu, Kaname) On the structure of the automorphism group of a compact Riemann surface of genus 3. 82k:14017
 Martens, Henrik H. Problems in the theory of closed Riemann surfaces. 82a:14011
 Morikawa, Hisasi On differential invariants of holomorphic projective curves. 82a:14012

- Natanzon, S. M. Automorphisms of the Riemann surface of an M -curve. (Russian) 82b:14020
 Total number of ovals of the real forms of a complex algebraic curve. (Russian) 82c:14037

secondary classifications:

- Bos, H. J. M. The "construction of equations", a forgotten ancestor of algebraic geometry. (Dutch) (82i:01018)
 Cormack, W. J. (with Hall, G. S.) Spinors, algebraic geometry, and the classification of second-order symmetric tensors in general relativity. (82f:83061)
 Hall, G. S. See Cormack, W. J., (82f:83061)
 Natanzon, S. M. The order of a finite group of homeomorphisms of a surface onto itself, and the number of real forms of a complex algebraic curve. (Russian) (82b:14019)
 Supplement: "Lobačevskii geometry and automorphisms of complex M -curves" [*Geometric methods in problems of analysis and algebra* (Russian), pp. 130-151, Jaroslav. Gos. Univ., Yaroslavl', 1978; MR 81m:30042]. (Russian) (82c:30014)
 Rohlin, V. A. New inequalities in the topology of real plane algebraic curves. (Russian) (82c:14066)
 Viro, O. Ja. Curves of degree 7, curves of degree 8 and the Ragsdale conjecture. (Russian) (82c:14067)

14Jxx Surfaces and higher-dimensional varieties

14J05 Picard group

- Fujita, Takao Cancellation problem of complete varieties. 82k:14033
 Kani, Ernst Eine Verallgemeinerung des Satzes von Castelnuovo-Severi. 82m:14017

secondary classifications:

- Gurjar, R. V. Affine varieties dominated by \mathbb{C}^2 . (82b:14008)

14J10 Families, moduli, classification: algebraic theory

- Chiberto, Ciro Canonical surfaces with $p_g = p_a = 4$ and $K^2 = 5, \dots, 10$. 82k:14018
 Dëmin, I. V. Fano threefolds that can be represented as rulings over surfaces. (Russian) 82g:14034
 Itaka, Shigeru Some applications of logarithmic Kodaira dimension. 82a:14038
 Kawamata, Yujiro Addition formula of logarithmic Kodaira dimensions for morphisms of relative dimension one. 82d:14019
 Invariance of pluri-genera of a degenerating family of algebraic surfaces. 82i:14019
 Kurke, Herbert On Castelnuovo's criterion for rational surfaces. 82i:14020
 Lang, William E. A short proof of Castelnuovo's criterion of rationality. 82m:14018
 Letizia, Maurizio Complete linear systems on Enriques surfaces. (Italian) 82c:14039
 Matsusaka, Teruhisa On some cohomology groups of invertible sheaves. 82a:14013
 Merindol, Jean-Yves Surfaces normales dont le faisceau dualisant est trivial. (English summary) [Normal surfaces with a trivial dualizing sheaf] 82m:14019
 Naruki, Isao Cross ratios as moduli of del Pezzo surfaces of degree one. 82f:14029
 Persson, Ulf (with Pinkham, Henry Charles) Degeneration of surfaces with trivial canonical bundle. 82f:14030
 Pinkham, Henry Charles See Persson, Ulf, 82f:14030
 Sakai, Fumio Semistable curves on algebraic surfaces and logarithmic pluricanonical maps. 82f:14031
 Sarkisov, V. G. Birational automorphisms of conic bundles. (Russian) 82g:14035
 Shah, Jayant A complete moduli space for $K3$ surfaces of degree 2. 82j:14030
 Sugie, Tohru On a characterization of surfaces containing cylinderlike open sets. 82c:14026
 Todorov, A. N. A construction of surfaces with $p_g = 1$, $q = 0$ and $2 < (K^2) < 8$. Counterexamples of the global Torelli theorem. 82k:14034
 Tsumoda, Shuichiro The structure of open algebraic surfaces and its application to plane curves. 82i:14021
 Van de Ven, A. On the 2-connectedness of very ample divisors on a surface. 82f:14032
 Viehweg, Eckart Klassifikationstheorie algebraischer Varietäten der Dimension drei. 82c:14027
 Wilson, P. M. H. The behaviour of the plurigenera of surfaces under algebraic smooth deformations. 82b:14021

secondary classifications:

- Dëmin, I. V. Boundedness of the degree of Fano threefolds that are representable by conic bundles. (Russian) (82m:14024)
 Lewin-Ménégaux, Renée See Martin-Deschamps, Mireille, (82g:14017)
 Looijenga, Eduard (with Peters, Chris) Torelli theorems for Kähler $K3$ surfaces. (82c:32035)
 Martin-Deschamps, Mireille (with Lewin-Ménégaux, Renée) Surfaces de type général dominées par une variété fixe. (English summary) (82g:14017)
 Miyazaki, Masayoshi Regular subrings of a polynomial ring. (82b:13003)
 Naruki, Isao (with Sekiguchi, Jiro) A modification of Cayley's family of cubic surfaces and birational action of $W(E_6)$ over it. (82j:14032a)
 Cross ratios as moduli of cubic surfaces. (82j:14032b)
 Peters, Chris On automorphisms of compact Kähler surfaces. (82c:32029)
 See also Looijenga, Eduard, (82a:32035)
 Sekiguchi, Jiro See Naruki, Isao, (82j:14032a)
 Shah, Jayant Degenerations of $K3$ surfaces of degree 4. (82g:14039)

14J15 Moduli, classification: analytic theory [See also 32J15.]

- Kawamata, Yujiro (with Viehweg, Eckart) On a characterization of an abelian variety in the classification theory of algebraic varieties. 82c:14028

- Kulikov, Vik. S. Surgery of degenerations of surfaces with $\kappa=0$. (Russian) **82d:14020**
 Morrison, David R. Semistable degenerations of Enriques' and hyperelliptic surfaces. **82m:14020**
 Sommese, Andrew John Hyperplane sections of projective surfaces. I. The adjunction mapping. **82f:14033**
 Viehweg, Eckart See Kawamata, Yujiro, **82c:14028**
 Wilson, P. M. H. The pluricanonical map on varieties of general type. **82e:14041**

secondary classifications:

- Inoue, Masahisa (with Kobayashi, Shoshichi; Ochiai, Takushiro) Holomorphic affine connections on compact complex surfaces. **(82g:32033)**
 Kobayashi, Shoshichi See Inoue, Masahisa; et al., **(82g:32033)**
 Laufer, Henry B. Lifting cycles to deformations of two-dimensional pseudoconvex manifolds. **(82j:32048)**
 Ochiai, Takushiro See Inoue, Masahisa; et al., **(82g:32033)**
 Todorov, A. N. Surfaces of general type with $p_g=1$ and $(K, K)=1$. I. **(82i:14024)**
 Applications of the Kähler-Einstein-Calabi-Yau metric to moduli of $K3$ surfaces. **(82k:32065)**
 Ueno, Kenji On three-dimensional compact complex manifolds with nonpositive Kodaira dimension. **(82c:32030)**
 Usui, Sampaï Period map of surfaces with $p_g=c_1^2=1$ and K ample. **(82e:14040)**
 Wilson, P. M. H. The behaviour of the plurigenera of surfaces under algebraic smooth deformations. **(82b:14021)**

14J17 Singularities of surfaces

- Bădescu, Lucian Dualizing divisors of two-dimensional singularities. **82c:14029**
 (Demazure, Michel) See Seminar: Singularities of Surfaces, **82d:14021**
 Edge, W. L. Nodal cubic surfaces. **82a:14014**
 Flenner, Hubert Rationale quasihomogene Singularitäten. **82g:14036**
 Miyazaki, Masayoshi Singularities of normal affine surfaces containing cylinderlike open sets. **82k:14035**
 (Pinkham, Henry Charles) See Seminar: Singularities of Surfaces, **82d:14021**
 Rosoff, Jeffrey A. Effective divisor classes and blowings-up of P^2 . **82c:14042**
 Slodowy, Peter ★ Simple singularities and simple algebraic groups. **82g:14037**
 Steinberg, Robert Kleinian singularities and unipotent elements. **82j:14031**
 (Teissier, Bernard) See Seminar: Singularities of Surfaces, **82d:14021**
 Palaiseau ★ Séminaire sur les Singularités des Surfaces. (French) [Seminar on the Singularities of Surfaces] **82d:14021**
 Seminar:

- Singularities of Surfaces ★ Séminaire sur les Singularités des Surfaces. (French) [Seminar on the Singularities of Surfaces] **82d:14021**
 Singularities of surfaces ★ Séminaire sur les Singularités des Surfaces. (French) [Seminar on the Singularities of Surfaces] **82d:14021**

secondary classifications:

- Adkins, William A. Seminormal surfaces. **(82j:13025)**
 Briancón, J. (with Henry, Jean-Pierre-Georges) Équisingularité générique des familles de surfaces à singularité isolée. (English summary) **(82j:14007)**
 Henry, Jean-Pierre-Georges See Briancón, J., **(82j:14007)**
 Knörrer, Horst ★ Isolierte Singularitäten von Durchschnitten zweier Quadriken. (German) [Isolated singularities of the intersections of two quadrics] **(82g:14006)**
 Kurke, Herbert On Castelnuovo's criterion for rational surfaces. **(82i:14020)**
 Lanteri, Antonio (with Struppa, Daniele) Degenerations of compact orientable surfaces and their classification. (Italian summary) **(82i:7008)**
 Looijenga, Eduard Invariant theory for generalized root systems. **(82f:17011)**
 Merindol, Jean-Yves Surfaces normales dont le faisceau dualisant est trivial. (English summary) [Normal surfaces with a trivial dualizing sheaf] **(82m:14019)**
 Nakamura, Iku Inoue-Hirzebruch surfaces and a duality of hyperbolic unimodular singularities. I. **(82f:14007)**
 Naruki, Isao Cross ratios as moduli of del Pezzo surfaces of degree one. **(82f:14029)**
 Ohyanagi, Shigeki On two-dimensional normal singularities of type A_n , D_n and E_n . **(82k:32037)**
 See also Yoshinaga, Etsuo, **(82g:32018)**
 Reid, Miles Canonical 3-folds. **(82i:14025)**
 Sekiguchi, Jirō (with Shimizu, Yasuhiro) Simple singularities and infinitesimally symmetric spaces. **(82g:17007)**
 Shah, Jayant Degenerations of $K3$ surfaces of degree 4. **(82g:14039)**
 Shimizu, Yasuhiro See Sekiguchi, Jirō, **(82g:17007)**
 Slodowy, Peter ★ Four lectures on simple groups and singularities. **(82b:14002)**
 Struppa, Daniele See Lanteri, Antonio, **(82i:57008)**
 Tjurin, A. N. Geometry of singularities of a general quadratic form. (Russian) **(82i:14015)**
 Wagreich, Philip Algebras of automorphic forms with few generators. **(82e:10044)**
 Automorphic forms and singularities with C^* -action. **(82m:10045)**
 Yoshinaga, Etsuo (with Ohyanagi, Shigeki) Two-dimensional quasihomogeneous isolated singularities with geometric genus equal to two. **(82g:32018)**

14J20 Arithmetic ground fields [See also 10Bxx, 14Gxx.]

- Shioda, Tetsuji Supersingular $K3$ surfaces. **82c:14030**

secondary classifications:

- Holzapfel, Rolf-Peter ★ Arithmetische Kugelquotientenflächen. (German) [Arithmetic spherical quotient surfaces] **(82a:10030a)**
 ★ Arithmetische Kugelquotientenflächen. (German) [Arithmetic spherical quotient surfaces] **(82a:10030b)**
 ★ Arithmetische Kugelquotientenflächen (Picardsche Modulflächen). (German)

- [Arithmetic spherical quotient surfaces (Picard modular surfaces)] **(82a:10030c)**
 Kozłowski, Krzysztof The extensions of commutative Moufang loops of period 3. (Polish summary) **(82c:20119)**
 Kuramoto, Yoshiyuki On Hilbert modular varieties of bicyclic biquadratic fields. **(82d:10041)**

14J25 Special surfaces

- Ambrogio, Elisabetta (with Romagnoli, Daniela) A relation between some projective invariants of an algebraic surface in characteristic p . (Italian. English summary) **82c:14036**
 Beauville, Arnaud Sur le nombre maximum de points doubles d'une surface dans P^3 ($\mu(5)=31$). **82k:14037**
 (Bogomolov, F. A.) See Martin-Deschamps, Mireille, **82c:14045**
 Collino, Alberto (with Murre, Jacob P.; Welters, Gerard E.) On the family of conics lying on a quartic threefold. **82h:14022**
 Edge, W. L. The discriminant of a cubic surface. **82e:14043**
 Ghione, Franco Quelques résultats de Corrado Segre sur les surfaces réglées. **82k:14038**
 Homma, Yuiko Projective normality and the defining equations of ample invertible sheaves on elliptic ruled surfaces with $e \geq 0$. **82e:14044**
 Ignatenko, V. F. Algebraic surfaces with the symmetry group of the polyhedron S_{31} . (Russian) **82i:14022**
 On algebraic surfaces with symmetry groups A_n , B_n , D_n . (Russian) **82m:14021**
 Katsura, Toshiyuki On Kummer surfaces in characteristic 2. **82d:14022**
 Lang, Jeffrey An example related to the affine theorem of Castelnuovo. **82k:14039**
 Lanteri, Antonio (with Palleschi, Marino) On elliptic scrolls. (Italian. English summary) **82g:14038**
 Looijenga, Eduard On quartic surfaces in projective 3-space. **82d:14023**
 Martin-Deschamps, Mireille Courbes de genre géométrique borné sur une surface de type général [d'après F. A. Bogomolov]. **82c:14045**
 Matsunaga, Hiromichi Smooth circle group actions on complex surfaces. **82h:14023**
 Murre, Jacob P. See Collino, Alberto; et al., **82h:14022**
 Naruki, Isao (with Sekiguchi, Jirō) A modification of Cayley's family of cubic surfaces and birational action of $W(E_6)$ over it. **82j:14032a**
 Cross ratios as moduli of cubic surfaces. **82j:14032b**
 Palleschi, Marino See Lanteri, Antonio, **82g:14038**
 Rassias, Themistocles M. On Hilbert's sixteenth problem for real algebraic curves. **82f:14034**
 Romagnoli, Daniela See Ambrogio, Elisabetta, **82c:14036**
 Rudakov, A. N. (with Šafarevič, I. R.) Degeneration of surfaces of type $K3$ over fields of finite characteristic. (Russian) **82k:14040**
 Russell, Peter On affine-ruled rational surfaces. **82h:14024**
 Šafarevič, I. R. See Rudakov, A. N., **82k:14040**
 Sasaki, Ryuji Bounds on the degree of the equations defining Kummer varieties. **82i:14023**
 Sekiguchi, Jirō See Naruki, Isao, **82j:14032a**
 Shah, Jayant Degenerations of $K3$ surfaces of degree 4. **82g:14039**
 Stillier, Peter F. Elliptic curves over function fields and the Picard number. **82f:14035**
 Todorov, A. N. Surfaces of general type with $p_g=1$ and $(K, K)=1$. I. **82i:14024**
 Treutloff, Marvin D. The Fermat surface and its periods. **82f:14033**
 Vujaković, Dušan Ruled surfaces whose generators are rays of a congruence of third order and first class, and whose directrix is a conic section. (Russian. Serbo-Croatian summary) **82c:14046**
 Welters, Gerard E. See Collino, Alberto; et al., **82h:14022**

secondary classifications:

- Ciliberto, Ciro Canonical surfaces with $p_g=p_a=4$ and $K^2=5, \dots, 10$. **(82i:14018)**
 (Giraud, Jean) See Surfaces algébriques, **(82j:10052)**
 Green, Mark (with Griffiths, Phillip A.) Two applications of algebraic geometry to entire holomorphic mappings. **(82h:32026)**
 Griffiths, Phillip A. See Green, Mark, **(82h:32026)**
 Harlamos, V. M. Real algebraic surfaces. (Russian) **(82c:14032)**
 Hirzebruch, F. The canonical map for certain Hilbert modular surfaces. **(82g:10046)**
 (Illusie, Luc) See Surfaces algébriques, **(82j:10052)**
 Lang, William E. Two theorems on de Rham cohomology. **(82d:14015)**
 Merindol, Jean-Yves Surfaces normales dont le faisceau dualisant est trivial. (English summary) [Normal surfaces with a trivial dualizing sheaf] **(82m:14019)**
 Nygaard, Niels O. Higher de Rham-Witt complexes of supersingular $K3$ surfaces. **(82d:14014)**
 Persson, Ulf (with Pinkham, Henry Charles) Degeneration of surfaces with trivial canonical bundle. **(82f:14030)**
 Pinkham, Henry Charles See Persson, Ulf, **(82f:14030)**
 (Raynaud, Michel) See Surfaces algébriques, **(82j:10052)**
 Shah, Jayant A complete moduli space for $K3$ surfaces of degree 2. **(82j:14030)**
 Shioda, Tetsuji Supersingular $K3$ surfaces. **(82c:14030)**
 Šokurov, V. V. A study of the homology of Kuga varieties. (Russian) **(82f:14023)**
 Sugie, Tohru On a characterization of surfaces containing cylinderlike open sets. **(82c:14026)**
 Todorov, A. N. A construction of surfaces with $p_g=1$, $q=0$ and $2 \leq (K^2) \leq 8$. Counterexamples of the global Torelli theorem. **(82k:14034)**
 Usui, Sampaï Note on the example of Kinef. **(82b:14005)**
 Orsay ★ Surfaces algébriques. (French) [Algebraic surfaces] **(82j:10052)**
 Seminar:
 Algebraic Geometry ★ Surfaces algébriques. (French) [Algebraic surfaces] **(82j:10052)**
 Surfaces algébriques ★ Surfaces algébriques. (French) [Algebraic surfaces] **(82j:10052)**
- 14J30 Special 3-folds [See also 14E05.]
- Ambrogio, Elisabetta (with Romagnoli, Daniela) An elementary example of a Moishezon manifold that is not algebraic. (Italian. English summary) **82e:14047**

- Batyrev, V. V. Toric Fano threefolds. (Russian) **82m:14022**
 Beltrametti, Mauro (with Palleschi, Marino) On the vanishing of certain cohomology groups of a normal variety. (Italian. English summary) **82m:14023**
 Demailly, J. P. Boundedness of the degree of Fano threefolds that are representable by conic bundles. (Russian) **82m:14024**
 Palleschi, Marino See Beltrametti, Mauro, **82m:14023**
 Panis, I. A. Rationality of nets of conics with a curve of degeneration of degree five and even theta-characteristic. (Russian) **82g:14040**
 Reid, Miles Canonical 3-folds. **82i:14025**
 Romagnoli, Daniela See Ambrogio, Elisabetta, **82e:14047**
 Tannenbaum, Allen The Brauer group and unirationality: an example of Artin-Mumford. **82h:14025**
 Tikhomirov, A. S. The intermediate Jacobian of double P^3 that is branched in a quartic. (Russian) **82i:14041**
 Ueno, Kenji Birational geometry of algebraic threefolds. **82i:14026**

secondary classifications:

- Matsunaka, Teruhisa On polarized varieties of dimension 3. II. **(82j:14008)**
 Ueno, Kenji Classification of algebraic varieties. II. Algebraic threefolds of parabolic type. **(82i:14012)**
 Wilson, P. M. H. On complex algebraic varieties of general type. **(82i:14008)**

14J35 Special 4-folds [See also 14E05.]

14J40 Special n -folds

- Fujita, Takao On the structure of polarized manifolds with total deficiency one. I. **82i:14015**
 (with Roberts, Joel) Varieties with small secant varieties: the extremal case. **82i:14042**
 On the structure of polarized manifolds with total deficiency one. II. **82j:14034**
 Jurkiewicz, J. Chow ring of projective nonsingular torus embedding. **82m:14025**
 Roberts, Joel See Fujita, Takao, **82i:14042**
 Serpico, Maria Ezia Fano varieties of dimensions $n \geq 4$ and of index $r \geq n-1$. (Italian) **82i:14016**

secondary classifications:

- Ran, Ziv Cycles on Fermat hypersurfaces. **(82d:14005)**

14J99 None of the above, but in this section

- Itaka, Shigeru The virtual singularity theorem and the logarithmic bigenus theorem. **82h:14022**
 Karpuškin, V. N. The number of complement components for the level hypersurface of a harmonic polynomial. (Russian. English summary) **82m:14026**

secondary classifications:

- Akbulut, Selman (with Kirby, Robion) Branched covers of surfaces in 4-manifolds. **(82j:57001)**
 Becker, Ottfried Quasidoppelkörper. **(82j:12018)**
 Dlubek, Helga (with Friedrich, Thomas) Spektraleigenschaften des Dirac-Operators—die Fundamentallösung seiner Wärmeleitungsgleichung und die Asymptotenentwicklung der Zeta-Funktion. **(82g:58087)**
 Friedrich, Thomas See Dlubek, Helga, **(82g:58087)**
 Kas, A. On the handlebody decomposition associated to a Lefschetz fibration. **(82j:57012)**
 Kirby, Robion See Akbulut, Selman, **(82j:57001)**
 Kulkarni, Ravindra S. (with Shalen, Peter B.) A note on real cubic surfaces. **(82d:57003)**
 Compact surfaces as complete intersections. **(82d:57004)**
 (with Wood, John W.) Topology of nonsingular complex hypersurfaces. **(82j:57008)**
 Ramanan, S. Orthogonal and spin bundles over hyperelliptic curves. **(82g:14022)**
 Sakai, Fumio Symmetric powers of the cotangent bundle and classification of algebraic varieties. **(82h:32043)**
 Shalen, Peter B. See Kulkarni, Ravindra S., **(82d:57003)**
 Wilson, P. M. H. On complex algebraic varieties of general type. **(82i:14008)**
 Wood, John W. See Kulkarni, Ravindra S., **(82j:57008)**

14Kxx Abelian varieties and schemes

14K05 Algebraic theory

- Chudnovsky, Gregory V. Degrés de sous-variétés contenant des "cubes" de groupes algébriques. (English summary) **82b:14023**
 Mukai, Shigeru Duality between $D(X)$ and $D(\hat{X})$ with its application to Picard sheaves. **82f:14036**
 Ran, Ziv On subvarieties of abelian varieties. **82d:14024**
 Sekiguchi, Tsutomu On the fields of rationality for curves and for abelian varieties. **82i:14027**

secondary classifications:

- Katsura, Toshiyuki On Kummer surfaces in characteristic 2. **(82d:14022)**
 Sasaki, Ryūji Bounds on the degree of the equations defining Kummer varieties. **(82i:14023)**
 Some remarks on the equations defining abelian varieties. **(82h:14028)**

14K07 Elliptic curves, one-dimensional theory

- Adams, William W. (with Razar, Michael J.) Multiples of points on elliptic curves and continued fractions. **82e:14031**
 Frey, Gerhard Cyclic isogenies and nonstandard arithmetic. **82e:14048**
 Jaffee, Harris Degeneration of real elliptic curves. **82b:14024**
 Kenku, M. A. The modular curves $X_0(65)$ and $X_0(91)$ and rational isogeny. **82j:14035**
 Lubin, Jonathan Canonicity of a cyclic subgroup of an elliptic curve. **82e:14032**
 (Mazur, Barry) See Serre, Jean-Pierre, **82e:14049**
 Perrin-Riou, Bernadette Groupe de Selmer à 2 variables des courbes elliptiques à multiplication complexe. [Selmer group with 2 variables of elliptic curves with complex multiplication] (See **82j:10004**)
 Razar, Michael J. See Adams, William W., **82e:14031**
 Rosen, Michael Abel's theorem on the lemniscate. **82g:14041**
 Serre, Jean-Pierre Points rationnels des courbes modulaires $X_0(N)$ [d'après Barry Mazur]. **82e:14049**
 Silverman, Joseph H. Lower bound for the canonical height on elliptic curves. **82i:14043**

secondary classifications:

- Bertrand, Daniel Kummer theory on the product of an elliptic curve by the multiplicative group. **(82i:12003)**
 Bijlma, Alex An elliptic analogue of the Franklin-Schneider theorem. (French summary) **(82e:10042)**
 Bölling, Reinhard Über einen Homomorphismus der rationalen Punkte elliptischer Kurven. **(82d:12002)**
 Gillard, Roland Unités elliptiques et fonctions L p -adiques. **(82j:12005)**
 Hà Huy Khoái Sur une conjecture de Mazur et Swinnerton-Dyer. (English summary) **(82i:12015)**
 Harris, Michael The annihilators of p -adic induced modules. **(82f:20018)**
 Jank, Gerhard ★ Periodische Lösungen der elliptischen sinh-Gordon Gleichung. (German) [Periodic solutions of the elliptic sinh-Gordon equation] **(82m:35005)**
 Kenku, M. A. Corrigendum: "The modular curve $X_0(169)$ and rational isogeny" [J. London Math. Soc. (2) **22** (1980), no. 2, 239–244; MR **81m:10048**]. **(82h:10039)**
 Kramer, Kenneth Arithmetic of elliptic curves upon quadratic extension. **(82g:14028)**
 Kubert, Daniel S. (with Lang, Serge) Units in the modular function field. V. Iwasawa theory in the modular tower. **(82h:12016)**
 Lang, Serge See Kubert, Daniel S., **(82h:12016)**
 Li, Jing Hui A conjecture about elliptic curves. (Chinese) **(82d:10039)**
 Mazur, Barry On the arithmetic of special values of L functions. **(82e:14033)**
 Mestre, Jean-François Courbes elliptiques et groupes de classes d'idéaux de certains corps quadratiques. **(82j:12004)**
 Ono, Takashi On the relative Mordell-Weil rank of elliptic quartic curves. **(82d:10030)**
 Rück, Hans-Georg Diskriminanten zu singulären Werten von j . **(82f:10027)**

14K10 Algebraic moduli, classification

- Narasimhan, M. S. (with Nori, Madhav V.) Polarizations on an abelian variety. **82i:14033**
 Nori, Madhav V. See Narasimhan, M. S., **82i:14033**
 Norman, Peter (with Oort, Frans) Moduli of abelian varieties. **82h:14026**
 Oort, Frans See Norman, Peter, **82h:14026**

secondary classifications:

- Bertrand, Daniel (with Waldschmidt, Michel) Quelques travaux récents en théorie des nombres transcendants. **(82g:10050)**
 Donagi, Ron The tetragonal construction. **(82a:14009)**
 Katsura, Toshiyuki On Kummer surfaces in characteristic 2. **(82d:14022)**
 Langlands, Robert P. Sur la mauvaise réduction d'une variété de Shimura. **(82e:10039)**
 Madan, Manohar L. (with Madden, Daniel J.) On the theory of congruence function fields. **(82h:12011)**
 Madden, Daniel J. See Madan, Manohar L., **(82h:12011)**
 Milne, J. S. Points on Shimura varieties mod p . **(82e:10048)**
 Namikawa, Yukihiko ★ Toroidal compactification of Siegel spaces. **(82a:32034)**
 Oort, Frans Abelian varieties: moduli and lifting properties. **(82e:14050)**
 (with Steenbrink, Joseph) The local Torelli problem for algebraic curves. **(82i:14014)**
 Coarse and fine moduli spaces of algebraic curves and polarized abelian varieties. **(82j:14021)**
 Ran, Ziv On subvarieties of abelian varieties. **(82d:14024)**
 Steenbrink, Joseph See Oort, Frans, **(82i:14014)**
 Waldschmidt, Michel See Bertrand, Daniel, **(82g:10050)**

14K15 Arithmetic ground fields [See also 10Bxx, 10Dxx, 14Gxx.]

- Deligne, Pierre Cycles de Hodge absolus et périodes des intégrales des variétés abéliennes. **82h:14027**
 Katz, Nicholas M. Galois properties of torsion points on abelian varieties. **82d:14025**
 Mori, Shigefumi On Tate conjecture concerning endomorphisms of abelian varieties. **82d:14026**
 Oort, Frans Abelian varieties: moduli and lifting properties. **82e:14050**
 Vvedens'kii, O. M. The Artin effect in abelian varieties. II. (Russian) **82g:14042**
- secondary classifications:
- Bégueri, Lucile Dualité sur un corps local à corps résiduel algébriquement clos. (English summary) **(82k:12019)**
 Ditters, E. J. On the classification of smooth commutative formal groups. Higher Hasse-Witt matrices of an abelian variety in positive characteristic. **(82d:14027)**
 Flicker, Yuval Z. Linear forms on arithmetic abelian varieties: ineffective bounds. **(82f:10049)**

- Goss, David Modular forms for F_7 . (82m:10049)
 Gross, Benedict H. (with Zagier, Don) On the critical values of Hecke L -series. (82g:14026)
 Langlands, Robert P. On the zeta functions of some simple Shimura varieties. (82h:10042)
 Masser, David W. Small values of the quadratic part of the Néron-Tate height. (See 82j:10004)
 Ribet, Kenneth A. Sur les variétés abéliennes à multiplications réelles. (English summary) (82f:14021)
 Sekiguchi, Tsutomu The coincidence of fields of moduli for nonhyperelliptic curves and for their Jacobian varieties. (82h:14020)
 Zagier, Don See Gross, Benedict H., (82g:14026)

14K20 Analytic theory; abelian integrals and differentials

- Gunning, R. C. On the period classes of Prym differentials. I. 82f:14037

secondary classifications:

- Deift, P. (with Lund, F.; Trubowitz, E.) Nonlinear wave equations and constrained harmonic motion. (82g:35102)
 (with Trubowitz, E.) An identity among squares of eigenfunctions. (82g:34022)
 Dumont, Dominique Une approche combinatoire des fonctions elliptiques de Jacobi. (82k:33004)
 Lund, F. See Deift, P.; et al., (82g:35102)
 Trubowitz, E. See Deift, P., (82g:34022) and (82g:35102)

14K22 Complex multiplication [See also 10D25.]

- Greenberg, Ralph On the Jacobian variety of some algebraic curves. 82j:14036
 Schmidt, C.-G. Der Definitionskörper für den Zerfall einer abelschen Varietät mit komplexer Multiplikation. 82f:14038
 Yoshida, Hiroyuki Abelian varieties with complex multiplication and representations of the Weil groups. 82k:14044

secondary classifications:

- Cassou-Noguès, Pierrette p -adic L -functions for elliptic curves with complex multiplication. I. (82f:12019)
 Goldstein, Catherine (with Schappacher, Norbert) Séries d'Eisenstein et fonctions L de courbes elliptiques à multiplication complexe. [Eisenstein series and L functions of elliptic curves with complex multiplication] (82m:12007)
 Hida, Haruzo On abelian varieties with complex multiplication as factors of the abelian variety attached to Hilbert modular forms. (82f:10036)
 On abelian varieties with complex multiplication as factors of the Jacobians of Shimura curves. (82k:10029)
 Lai, K. F. (with Wong, Bun) Two moduli problems and some of their connections with differential geometry. (82h:14006)
 Morita, Yasuo Classification of a family of abelian varieties parametrized by reduction modulo \mathfrak{p} of a Shimura curve. (82c:10036)
 Schappacher, Norbert See Goldstein, Catherine, (82m:12007)
 Shimura, Goro The periods of abelian varieties with complex multiplication and the special values of certain zeta functions. (82h:10041)
 Šokurov, V. V. Shimura integrals of cusp forms. (Russian) (82h:10029)
 A study of the homology of Kuga varieties. (Russian) (82f:14023)
 Wong, Bun See Lai, K. F., (82h:14006)

14K25 Theta functions

- Ahmad, M. Ifkhar (with Taj, Shahadat Ali) Elliptic functions of hyperbolic character. 82f:14039
 Barsotti, I. Theta functions in positive characteristic. 82e:14051
 Čerednik, I. V. On the conditions of reality in "finite-gap integration". (Russian) 82f:14040
 Chudnovsky, David V. (with Chudnovsky, Gregory V.) Completely X -symmetric S -matrices corresponding to theta functions. 82e:14034
 Chudnovsky, Gregory V. See Chudnovsky, David V., 82e:14034
 Cristante, V. Theta functions and Barsotti-Tate groups. 82e:14052
 Farkas, Hershel M. Vanishing theta constants. 82j:14037
 Hano, Jun-ichi A transformation formula of a generalized theta series. 82a:14017
 Igusa, Jun-ichi On Jacobi's derivative formula and its generalizations. 82e:14053
 Sasaki, Ryuji Some remarks on the equations defining abelian varieties. 82h:14028
 Shimizu, Atsushi Remarks on theta series. 82a:14018
 Taj, Shahadat Ali See Ahmad, M. Ifkhar, 82f:14039
 Takigawa, Nobumasa Weierstrass points and the vector of Riemann constants. (Japanese summary) 82a:14019
 Zagrodzinski, J. Some properties of multidimensional theta-function and SGE. 82g:14043

secondary classifications:

- Chudnovsky, David V. (with Chudnovsky, Gregory V.) Completely X -symmetric S -matrices corresponding to theta functions and models of statistical mechanics. (82f:10069)
 Chudnovsky, Gregory V. See Chudnovsky, David V., (82f:10069)
 Dubrovnik, B. A. On S. P. Novikov's conjecture in the theory of θ -functions and nonlinear equations of Korteweg-de Vries and Kadomtcev-Petviashvili type. (Russian) (82d:35088)
 Goodman, Sharon Symmetry properties of the zero sets of nil-theta functions. (82h:22007)
 Karasëv, V. P. (with Šelepín, L. A.) On the theory of generalized coherent states of SU_2 groups. (Russian. English summary) (82k:81026)

- Levitan, B. M. Almost periodic behavior of potentials with infinite zones. (Russian) (82i:31001)
 Lin, Fu Lai On cyclic automorphism groups of Riemann surfaces and theta functions. (82j:14026)
 McKean, H. P. Theta functions, solitons, and singular curves. (82f:14028)
 Boussinesq's equation on the circle. (82j:58063)
 Raab, Werner Kubische und biquadratische Thetafunktionen. I. (82h:10040a)
 Kubische und biquadratische Thetafunktionen. II. (82h:10040b)
 Richardson, Leonard F. Poisson summation on Kirillov orbits. (82h:22018)
 Šelepín, L. A. See Karasëv, V. P., (82k:81026)

14K30 Picard schemes, higher Jacobians

- Buruiă, Nicolae The Picard variety of a smooth projective curve. (Romanian. English summary) 82e:14035
 Donagi, Ron Group law on the intersection of two quadrics. 82h:14025
 Oda, Tadao (with Seshadri, C. S.) Compactifications of the generalized Jacobian variety. 82e:14054
 Seshadri, C. S. See Oda, Tadao, 82e:14054

secondary classifications:

- Donagi, Ron (with Smith, Roy Campbell) The degree of the Prym map onto the moduli space of five-dimensional abelian varieties. (82k:14030a)
 (with Smith, Roy Campbell) The structure of the Prym map. (82k:14030b)
 Kempf, George R. Toward the inversion of abelian integrals. II. (82a:14010b)
 Toward the inversion of abelian integrals. I. (82a:14010a)
 Sarkisov, V. G. Birational automorphisms of conic bundles. (82g:14035)
 Smith, Roy Campbell See Donagi, Ron, (82k:14030)
 Tihomirov, A. S. The intermediate Jacobian of double P^3 that is branched in a quartic. (Russian) (82k:14041)
 Viljamas, Matti On the structure of generalized Jacobian varieties. (82f:14026)

14K99 None of the above, but in this section

- Shiba, Masakazu Degeneration of abelian integrals on an open Riemann surface to elliptic ones. 82e:14055
 Yoshihara, Hisao Structure of complex tori with the automorphisms of maximal degree. 82k:14045

secondary classifications:

- Narasimhan, M. S. (with Nori, Madhav V.) Polarizations on an abelian variety. (82c:14033)
 Nori, Madhav V. See Narasimhan, M. S., (82c:14033)
 Novikov, S. P. A method of solving the periodic problem for the KdV equation and its generalization. (See 82m:35001)
 Sen, Shankar Continuous cohomology and p -adic Galois representations. (82e:12018)

14Lxx Group schemes [For linear algebraic groups, see 20Gxx. For Lie algebras, see 17B45.]

secondary classifications:

- Waterhouse, William C. ★Introduction to affine group schemes. (82e:14003)

14L05 Formal groups, p -divisible groups [See also 17B50.]

- Berthelot, Pierre (with Messing, William) Théorie de Dieudonné cristalline. I. 82f:14041
 Théorie de Dieudonné sur un anneau de valuation parfait. 82h:14026
 Ditters, E. J. On the classification of smooth commutative formal groups. Higher Hasse-Witt matrices of an abelian variety in positive characteristic. 82d:14027
 On the covariant Dieudonné-module of an abelian variety of dimension two over $W(k)$. 82f:14042
 Fontaine, Jean-Marc Modules galoisiens, modules filtrés et anneaux de Barsotti-Tate. 82k:14046
 Hazewinkel, Michiel ★Formal groups and applications. 82a:14020
 On formal groups. The functional equation lemma and some of its applications. 82d:14028
 Holodov, A. N. The algebraic theory of multivalued formal groups. (Russian) 82e:14056
 Laffaille, Guy Construction de groupes p -divisibles. Le cas de dimension 1. 82a:14021
 Groupes p -divisibles et modules filtrés: le cas peu ramifié. (English summary) 82i:14028
 Messing, William See Berthelot, Pierre, 82f:14041
 Oda, Takayuki Formal groups attached to elliptic modular forms. 82f:14043
 Šramko, T. S. Normal subgroups in the one-dimensional group of formally analytic transformations over a local ring. (Russian) 82e:14036

secondary classifications:

- Barsotti, I. Theta functions in positive characteristic. (82e:14051)
 Cristante, V. Theta functions and Barsotti-Tate groups. (82e:14052)
 Lecko, V. A. See Vostokov, S. V., (82i:12020)
 Morava, Jack The Weil group as automorphisms of the Lubin-Tate group. (82g:12017)
 Newman, Kenneth (with Sweedler, Moss E.) A realization of the additive Witt group. (82g:16016)
 Norman, Peter (with Oort, Frans) Moduli of abelian varieties. (82h:14026)
 Oort, Frans See Norman, Peter, (82h:14026)
 Sen, Shankar Continuous cohomology and p -adic Galois representations. (82e:12018)
 Sweedler, Moss E. See Newman, Kenneth, (82g:16016)
 Vostokov, S. V. (with Lecko, V. A.) Canonical decomposition in the group of points of a

- Lubin-Tate formal group. (Russian) (82i:12020)
 Yui, Noriko On the Jacobian variety of the Fermat curve. (82m:14016)

14L10 Group varieties

secondary classifications:

- Merzljakov, Ju. I. ★Рациональные группы. (Russian) [Rational groups] (82m:20001)

14L15 Group schemes

- Contou-Carrère, Carlos E. Corps de classes local géométrique relatif. (English summary) 82i:14029
 Schneider, Hans-Jürgen Zerlegbare Erweiterungen affiner Gruppen. 82f:14044
 Restriktion und Coerstriktion für algebraische Gruppen. 82f:14045
 Zerlegbare Untergruppen affiner Gruppen. 82f:14029
 Waterhouse, William C. (with Weisfeiler, Boris) One-dimensional affine group schemes. 82i:14057
 Weisfeiler, Boris See Waterhouse, William C., 82i:14057

secondary classifications:

- (Bertrand, Daniel) See Waldschmidt, Michel, (82k:10041)
 Cassidy, Phyllis J. Differential algebraic group structures on the plane. (82g:12024)
 Endô, Shizuo (with Miyata, Takehiko) Corrigenda: "On a classification of the function fields of algebraic tori" [Nagoya Math. J. 56 (1975), 85–104; MR 51 #458]. (82c:12028)
 Miyata, Takehiko See Endô, Shizuo, (82c:12028)
 Rosenlicht, Maxwell Initial results in the theory of linear algebraic groups. (82k:20072)
 (Serre, Jean-Pierre) See Waldschmidt, Michel, (82k:10041)
 Waldschmidt, Michel ★Nombres transcendants et groupes algébriques. (French) [Transcendental numbers and algebraic groups] (82k:10041)

14L17 Affine algebraic groups, hyperalgebra constructions [See also 17B45, 18D35.]

- Nakao, Zensho Polynomial group laws. 82h:14030a
 Polynomial group laws. II. 82h:14030b

secondary classifications:

- Bass, Hyman Applications polynomiales à jacobienne constante. [Polynomial mappings with constant Jacobian] (See 82m:10006)
 Nakao, Zensho Bi-algebraic groups. (82j:14038)
 Sullivan, John Brendan Frobenius operations on Hochschild cohomology. (82c:20054)

14L20 Finite group schemes

- Kempf, George R. Representations of algebraic groups in prime characteristics. 82h:14031
 Schneider, Hans-Jürgen Hochheben multiplikativer Untergruppen. 82f:14046

secondary classifications:

- Bégueri, Lucile Dualité sur un corps local à corps résiduel algébriquement clos. (English summary) (82k:12019)

14L25 Pro-algebraic group schemes

- Nakao, Zensho Bi-algebraic groups. 82j:14038
 Peterson, Brian Extensions of pro-affine algebraic groups. II. 82h:14032

secondary classifications:

- Duskin, J. Higher-dimensional torsors and the cohomology of topoi: the abelian theory. (82c:18006)
 Reineke, John H. Lie algebras and Hopf algebras. (82i:17010)

14L30 Group actions on varieties or schemes [See also 14D25.]

- Adamović, O. M. Equidimensional representations of simple algebraic groups. (Russian) 82h:14033
 Almkvist, Gert Representations of $\mathbb{Z}/p\mathbb{Z}$ in characteristic p and reciprocity theorems. 82k:14047
 Borho, Walter (with Kraft, Hanspeter) Über Bahnen und deren Deformationen bei linearen Aktionen reductiver Gruppen. (English summary) 82m:14027
 Charbonnel, J.-Y. (with Dixmier, J.) Sur la représentation coadjointe des algèbres de Lie résolubles. 82m:14028
 Dixmier, J. See Charbonnel, J.-Y., 82m:14028
 Hadžiev, Dž. ★Теория инвариантов бинарных форм. (Russian) [Theory of invariants of binary forms] 82k:14048
 Finite generation of algebras of invariants. (Russian) 82f:14047
 Hesselink, Wim H. Concentration under actions of algebraic groups. 82m:14029
 Kimura, Tatsuo Theory of prehomogeneous vector spaces. (Japanese) 82k:14049
 Koras, Mariusz Deformations of actions of linearly reductive groups. 82f:14048
 Kraft, Hanspeter See Borho, Walter, 82m:14027
 Nakajima, Haruhisa Invariants of finite abelian groups generated by transvections. 82i:14058
 Pauer, Franz Normale Einbettungen von G/U . [Normal embeddings of G/U] 82k:14050
 Pommerening, Klaus Invarianten unipotenter Gruppen. 82i:14029

- Seidenberg, A. On the functions invariant under the action of an algebraic group on an algebraic variety. (Italian summary) 82e:14059
 Świąciecka, Joanna Faithfully flat descent of linear actions of affine group schemes. 82a:14022

secondary classifications:

- Abeasis, Silvana The $GL(V)$ -invariant ideals in $S(S^2V)$. (Italian. English summary) (82f:15022)
 Andersen, Henning Haahr On the structure of Weyl modules. (82e:20051)
 Brion, Michel Représentations irréductibles des groupes de Lie simples dont l'algèbre des U -invariants est régulière. (English summary) [Irreducible representations of simple Lie groups whose algebra of U -invariants is regular] (82m:22014)
 De Concini, Corrado (with Procesi, Claudio) Symmetric functions, conjugacy classes and the flag variety. (82m:14030)
 Faltings, Gerd Formale Geometrie und homogene Räume. (82m:14006)
 Grabmeier, Johannes Young-Alternation und Garnir-Relationen. (82g:20027)
 Kang, Ming Chang Projective modules over some rings of invariants. (82b:13006)
 Kimelfeld, B. N. See Vinberg, É. A., (82e:32042)
 Kraft, Hanspeter (with Procesi, Claudio) Minimal singularities in GL_n . (82e:14007)
 Magid, Andy R. Dimension in rings with solvable algebraic group action. (82i:13015)
 Morrison, Kent The scheme of finite-dimensional representations of an algebra. (82f:16034)
 Nakajima, Haruhisa Modular representations of p -groups with regular rings of invariants. (82a:20016)
 Newstead, P. E. Invariants of pencils of binary cubics. (82d:14007)
 Northcott, D. G. ★Affine sets and affine groups. (82c:14002)
 Procesi, Claudio See Kraft, Hanspeter, (82e:14007) and De Concini, Corrado, (82m:14030)
 Raghunathan, M. S. Principal bundles on affine space. (82g:14021)
 Servedio, Frank J. The $GL(V)$ -module structure of $S^r(S^1(V))$, symmetric tensors of degree r on symmetric tensors of degree r on V . (82f:15021)
 Triantaphyllou, Deborah Diller Invariants of finite groups acting nonlinearly on rational function fields. (82c:12020)
 Vinberg, É. A. (with Kimelfeld, B. N.) Homogeneous domains on flag manifolds and spherical subsets of semisimple Lie groups. (Russian) (82e:32042)
 Vust, Thierry Foncteurs polynomiaux et théorie des invariants. (82b:15020)

14L35 Classical groups (geometric aspects)

- Großer, Rainer ★Degenerationsverhalten nilpotenter Konjugationsklassen klassischer Lie-Algebren in Charakteristik 2. (German) [Degeneration behavior of nilpotent conjugacy classes of classical Lie algebras in characteristic 2] 82j:14044
 Hesselink, Wim H. Nilpotency in classical groups over a field of characteristic 2. 82d:14030

secondary classifications:

- Černousov, V. I. On the rationality of spinor varieties over the rational number field. (Russian. English summary) (82m:14009)

14L40 Other algebraic groups (geometric aspects)

- Springer, T. A. Geometric questions arising in the study of unipotent elements. 82f:14049

secondary classifications:

- Borho, Walter Zum Induzieren unipotenter Klassen. [On the induction of unipotent classes] (82j:20090)
 Haboush, W. J. Central differential operators on split semisimple groups over fields of positive characteristic. (82a:20049)
 Ignatenko, V. F. Algebraic surfaces with the symmetry group of the polyhedron 3_{21} . (Russian) (82i:14022)
 Steinberg, Robert Kleinian singularities and unipotent elements. (82j:14031)

14L99 None of the above, but in this section

secondary classifications:

- Nadiu, Gh. S. Note on formal commutative Moufang loops. (Romanian. French summary) (82c:20120)

14Mxx Special varieties

14M05 Varieties defined by ring conditions (factorial, Macaulay)

secondary classifications:

- Boratyński, Maksymilian (with Eisenbud, David; Rees, David) On the number of generators of ideals in local Cohen-Macaulay rings. (82k:13021)
 Daep, U. (with Evans, A.) A note on Buchsbaum rings and localizations of graded domains. (82c:13026)
 Edelman, Paul H. The Bruhat order of the symmetric group is lexicographically shellable. (82j:06004)
 Eisenbud, David See Boratyński, Maksymilian; et al., (82k:13021)
 Ellingsrud, Geir (with Skjelbred, Tor) Profondeur d'anneaux d'invariants en caractéristique p . (82c:13015)
 Evans, A. See Daep, U., (82c:13026)
 Evans, E. Graham, Jr. (with Griffith, Phillip A.) Syzygies of small rank. (82j:13026)
 Garsia, Adriano M. Combinatorial methods in the theory of Cohen-Macaulay rings. (82f:06002)

- Goto, Shiro On Gorenstein rings. (Japanese) (82g:13019)
 Griffith, Phillip A. See Evans, E. Graham, Jr., (82j:13026)
 Rees, David See Boratyński, Maksymilian; et al., (82k:13021)
 Skjelbred, Tor See Ellingsrud, Geir, (82c:13015)

14M07 Low-codimension problems [See also 14Cxx.]

- Speiser, Robert Vanishing criteria and the Picard group for projective varieties of low codimension. 82g:14045

secondary classifications:

- Collino, Alberto (with Murre, Jacob P.; Welters, Gerard E.) On the family of conics lying on a quartic threefold. (82h:14022)
 Fujita, Takao (with Roberts, Joel) Varieties with small secant varieties: the extremal case. (82k:14042)
 Le Barz, Patrick Courbes générales de P^3 . (82f:14055)
 Murre, Jacob P. See Collino, Alberto; et al., (82h:14022)
 Roberts, Joel See Fujita, Takao, (82k:14042)
 Speiser, Robert Extending meromorphic functions on a Grassmann variety. (82g:14047)
 Welters, Gerard E. See Collino, Alberto; et al., (82h:14022)

14M10 Complete intersections

- Achilles, Rüdiger (with Vogel, Wolfgang) Über vollständige Durchschnitte in lokalen Ringen. 82e:14060
 Boratyński, Maksymilian Representing subschemes as schemes of zeros of a section of a vector bundle. 82e:14061
 Cassa, Antonio (with Verdi, Luisella) An inductive procedure to express every algebraic set in C^n as the intersection of n hypersurfaces. (Italian. English summary) 82c:14037
 Faltings, Gerd Ein Kriterium für vollständige Durchschnitte. 82f:14050
 Mkrtjan, M. A. Reconstruction of a system of algebraic equations from simple roots. (Russian) 82k:14034
 Ohm, Jack Space curves as ideal-theoretic complete intersections. 82f:14051
 Restuccia, Gaetano On a complete intersection problem for algebroid surfaces. (Italian. English summary) 82g:14046
 Verdi, Luisella See Cassa, Antonio, 82c:14037
 Vogel, Wolfgang See Achilles, Rüdiger, 82e:14060

secondary classifications:

- Barattero, Rosalba (with Zatini, Elsa) Relations between the type of a point on an algebraic variety and the type of its tangent cone. (82f:14013)
 Boratyński, Maksymilian Generating ideals up to radical. (82a:13004)
 Conte, A. (with Murre, Jacob P.) The Hodge conjecture for Fano complete intersections of dimension four. (82h:14003)
 Eisenbud, David Homological algebra on a complete intersection, with an application to group representations. (82d:13013)
 Faltings, Gerd Über lokale Kohomologiegruppen hoher Ordnung. (82f:14006)
 Libgober, Anatoly Some properties of the signature of complete intersections. (82h:14003)
 (with Wood, John W.; Zagier, Don) Congruences modulo powers of 2 for the signature of complete intersections. (82j:57009)
 Murre, Jacob P. See Conte, A., (82h:14003)
 Viola, Paolo On maximal systems of linear subvarieties of special complete intersections. (Italian. English summary) (82c:14017)
 Watanabe, Keiichi Invariant subrings which are complete intersections. I. Invariant subrings of finite abelian groups. (82d:13020)
 Wood, John W. See Libgober, Anatoly; et al., (82j:57009)
 Zagier, Don See Libgober, Anatoly; et al., (82j:57009)
 Zatini, Elsa See Barattero, Rosalba, (82f:14013)

14M12 Determinantal varieties

- Abiko, Tadayuki Classification of cubic forms with three variables. 82j:14039
 Eisenbud, David Introduction to algebras with straightening laws. 82i:14030
 Kleppe, H. (with Laksov, D.) The algebraic structure and deformation of Pfaffian schemes. 82h:14027
 Laksov, D. See Kleppe, H., 82h:14027

secondary classifications:

- Akin, Kaan (with Buchsbaum, David A.; Weyman, Jerzy) Resolutions of determinantal ideals: the submaximal minors. (82h:13011)
 Andrade, José F. Regular sequences of minors. (82h:13013)
 (with Simis, Aron) A complex that resolves the ideal of minors having $n-1$ columns in common. (82c:13020)
 Barth, Wolf Paul Counting singularities of quadratic forms on vector bundles. (82c:14016)
 Buchsbaum, David A. See Akin, Kaan; et al., (82h:13011)
 Huneke, Craig The arithmetic perfection of Buchsbaum-Eisenbud varieties and generic modules of projective dimension two. (82c:13021)
 Simis, Aron See Andrade, José F., (82c:13020)
 Weyman, Jerzy See Akin, Kaan; et al., (82h:13011)

14M15 Grassmannians, Schubert varieties [See also 51M35.]

- De Concini, Corrado (with Procesi, Claudio) Symmetric functions, conjugacy classes and the flag variety. 82m:14030
 Dochitjov, Constantin The Picard group of the Grassmannian algebraic manifold. (See 81j:93006b)

- Grigorov, H. See Kotli, O. A., 82h:14035
 Hiller, Howard L. Schubert calculus of a Coxeter group. 82m:14031
 Kotli, O. A. (with Grigorov, H.) The Grassmann variety G_{11} and some of its subvarieties. (Bulgarian. Russian and English summaries) 82h:14035
 Procesi, Claudio See De Concini, Corrado, 82m:14030
 Speiser, Robert Extending meromorphic functions on a Grassmann variety. 82g:14047
 Tihomirov, A. S. Constructive realization of a mapping of K -planes of the projective space P_n by a hypersurface of the projective space P_{k+1} . (Russian) 82i:14031

secondary classifications:

- Andersen, Henning Haahr Representations of algebraic groups via cohomology of line bundles. (See 82i:00012)
 Brockett, Roger W. (with Byrnes, Christopher I.) On the algebraic geometry of the output feedback pole placement map. (82i:93033a)
 (with Byrnes, Christopher I.) Multivariable Nyquist criteria, root loci, and pole placement: a geometric viewpoint. (82i:93033b)
 Byrnes, Christopher I. See Brockett, Roger W., (82i:93033)
 Lasoux, Alain Produit de Kronecker des représentations du groupe symétrique. (82b:20016)
 Degree of the dual of a Grassmann variety. (82k:14051)

14M17 Homogeneous spaces [See also 32M10, 53C30, 57T15.]

- Dochitjov, Constantin Sur l'algèbre de cohomologie de la variété grassmannienne complexe. 82h:14036
 Keller, O.-H. Die Homologiegruppen der Mannigfaltigkeit, die aus den k -Räumen auf einer nicht ausgearteten $2k$ -Quadrak besteht. 82f:14052

secondary classifications:

- Hazewinkel, Michiel (with Vorst, Ton) On the Snapper/Liebler-Vitale/Lam theorem on permutation representations of the symmetric group. (82k:20019)
 Iori, Samuel A. The self-intersection formula for flag bundles. (Italian summary) (82k:14017)
 Kim'fel'd, B. N. See Vinberg, É. A., (82c:32042)
 Morimoto, Hiroshi Realization of Chern classes by subvarieties with certain singularities. (82b:32045)
 Sakane, Yusuke (with Takeuchi, Masaru) On defining equations of symmetric submanifolds in complex projective spaces. (82g:32034)
 Stanley, Richard P. Weyl groups, the hard Lefschetz theorem, and the Sperner property. (82j:20083)
 Takeuchi, Masaru See Sakane, Yusuke, (82g:32034)
 Vinberg, É. A. (with Kim'fel'd, B. N.) Homogeneous domains on flag manifolds and spherical subsets of semisimple Lie groups. (Russian) (82c:32042)
 Vorst, Ton See Hazewinkel, Michiel, (82k:20019)

14M20 Rational varieties

- Bresinsky, Henrik (with Renschuch, Bodo) Basisbestimmung Veronesischer Projektionsideale mit allgemeiner Nullstelle $(t_0^n, t_0^{n-1}t_1, \dots, t_0^{n-1}t_1^{n-1})$. 82i:14032
 Kambayashi, Tatsuji On Fujita's strong cancellation theorem for the affine plane. 82e:14062
 Renschuch, Bodo See Bresinsky, Henrik, 82i:14032

secondary classifications:

- Colliot-Thélène, Jean-Louis Principe de Hasse pour certaines variétés rationnelles. (82j:14018)
 Edge, W. L. The discriminant of a cubic surface. (82e:14043)
 Gurjar, R. V. Affine varieties dominated by C^2 . (82h:14008)
 Kurke, Herbert On Castelnuovo's criterion for rational surfaces. (82i:14020)
 Lang, Jeffrey An example related to the affine theorem of Castelnuovo. (82k:14039)
 Miyazaki, Masayoshi Regular subrings of a polynomial ring. (82h:13003)
 (with Sugie, Tohru) Generically rational polynomials. (82e:14019)
 Russell, Peter On affine-ruled rational surfaces. (82h:14024)
 Sugie, Tohru See Miyazaki, Masayoshi, (82e:14019)
 Yoshida, Ken-ichi On the coefficient ring of a torus extension. (82i:13008)

14M99 None of the above, but in this section

- De Concini, Corrado (with Strickland, Elisabetta) On the variety of complexes. 82m:14032
 Jouanolou, J. P. Idéaux résultants. 82c:14038
 Strickland, Elisabetta See De Concini, Corrado, 82m:14032
 Villamayor, Orlando E. (with Villamayor, Orlando, Jr.) A remark on terrible points. 82c:14039
 Villamayor, Orlando, Jr. See Villamayor, Orlando E., 82c:14039

secondary classifications:

- Bărcănescu, Ș. (with Manolache, N.) Betti numbers of Segre-Veronese singularities. (82j:13029)
 Hovanskii, A. G. Newton polyhedra and the Euler-Jacobi formula. (Russian) (82g:32015)
 Iori, Samuel A. (with Ingleton, Aubrey W.) Tangent flag bundles and Jacobian varieties. I. (Italian summary) (82g:14014)
 Ingleton, Aubrey W. See Iori, Samuel A., (82g:14014)
 Jurkiewicz, J. Chow ring of projective nonsingular torus embedding. (82m:14025)
 Manolache, N. See Bărcănescu, Ș., (82j:13029)
 Roberts, Leslie G. A conjecture on Cohen-Macaulay type. (82j:13020)

14Nxx Classical methods and problems [See also 51–XX.]

14N05 Projective techniques

Edge, W. L. A pencil of four-nodal plane sextics. 82f:14053

secondary classifications:

- Conte, A. (with Murre, Jacob P.) The Hodge conjecture for Fano complete intersections of dimension four. (82b:14003)
 Grigorov, H. See Kotli, O. A., (82b:14035)
 Kotli, O. A. (with Grigorov, H.) The Grassmann variety G_{51} and some of its subvarieties. (Bulgarian. Russian and English summaries) (82b:14035)
 Murre, Jacob P. See Conte, A., (82b:14003)
 Penrose, Roger (with Smith, Cedric A. B.) A quadratic mapping with invariant cubic curve. (82c:51027)
 Piccollella, Lia Fioravanti Differential characterizations of some classes of algebraic varieties. (Italian. English summary) (82b:53019)
 Smith, Cedric A. B. See Penrose, Roger, (82c:51027)
 Vujaković, Dušan Ruled surfaces whose generators are rays of a congruence of third order and first class, and whose directrix is a conic section. (Russian. Serbo-Croatian summary) (82c:14046)

14N10 Enumerative problems

- Holme, Audun Embedding obstruction for smooth, projective varieties. I. 82f:14054
 Kleiman, Steven L. Chasles's enumerative theory of conics: a historical introduction. 82c:14033
 The enumerative theory of singularities. (Russian) 82g:14048
 Concerning the dual variety. 82m:14033
 Kulikov, V. S. See Kleiman, Steven L., 82g:14048
 Lasoux, Alain Degree of the dual of a Grassmann variety. 82k:14051
 Le Barz, Patrick Courbes générales de P^3 . 82f:14055
 Quadrisecantes d'une surface de P^3 . (English summary) 82a:14023
 Quine, J. R. Plücker equations for curves. 82k:14052
 Vainsescher, Israel The enumerative calculus of Schubert. (Portuguese) 82c:14040

secondary classifications:

- Beauville, Arnaud Sur le nombre maximum de points doubles d'une surface dans P^3 ($\mu(5)=31$). (82k:14037)
 Cih, A. K. Bezout's theorem in space, theories of functions. Solution of systems of algebraic equations. (Russian) (82k:14008)
 Collino, Alberto (with Murre, Jacob P.; Welters, Gerard E.) On the family of conics lying on a quartic threefold. (82b:14022)
 Ghione, Franco Quelques résultats de Corrado Segre sur les surfaces réglées. (82k:14038)
 Harris, Joseph Daniel A bound on the geometric genus of projective varieties. (82c:14010)
 Hazewinkel, Michiel (with Vorst, Ton) On the Snapper/Liebier-Vitale/Lam theorem on permutation representations of the symmetric group. (82k:20019)
 (Kleiman, Steven L.) See Schubert, Hermann, (82c:01073)
 Murre, Jacob P. See Collino, Alberto; et al., (82b:14022)
 Rassias, Themistocles M. On Hilbert's sixteenth problem for real algebraic curves. (82f:14034)
 Schubert, Hermann ★Kalkül der abzählenden Geometrie. (German) [Calculus of enumerative geometry] (82c:01073)
 Vorst, Ton See Hazewinkel, Michiel, (82k:20019)
 van der Waerden, B. L. The connectedness theorem and the concept of multiplicity. (82c:14013)
 Welters, Gerard E. See Collino, Alberto; et al., (82b:14022)
 Bibliography:
 Schubert, Hermann See Schubert, Hermann, (82c:01073)

14N99 None of the above, but in this section

- A'Campo, Norbert Sur la première partie du seizième problème de Hilbert. 82g:14049
 Arnold, V. I. (with Oleinik, O. A.) Topology of real algebraic varieties. (Russian) 82c:14064
 Freni Casale, Sveva On hypersurface loci of linear spaces. (Italian. English summary) 82f:14065
 Oleinik, O. A. See Arnold, V. I., 82c:14064
 Rohlin, V. A. New inequalities in the topology of real plane algebraic curves. (Russian) 82c:14066
 Viro, O. Ja. Curves of degree 7, curves of degree 8 and the Ragsdale conjecture. (Russian) 82c:14067

15–XX LINEAR AND MULTILINEAR ALGEBRA; MATRIX THEORY (finite and infinite)

15–01 Elementary exposition, textbooks

- Bertin, J. E. (with Bertin, Marie-José) ★Algèbre linéaire et géométrie classique. (French) [Linear algebra and classical geometry] 82j:15001a
 Bertin, Marie-José See Bertin, J. E., 82j:15001a
 (Dieudonné, Jean A.) See Bertin, J. E.; et al., 82j:15001a
 Heinhold, Josef (with Riedmüller, Bruno) ★Lineare Algebra und Analytische Geometrie. Teil I. (German) [Linear algebra and analytic geometry. Part I] 82m:15001
 Klamkin, Murray S. (with Pounder, James R.) Orthonormal matrices. 82k:15001
 Mallavin-Brameret, Marie-Paule (with Warusfel, A.) ★Algèbre linéaire et géométrie classique. (French) [Linear algebra and classical geometry] 82j:15001b

- Mutafian, Claude ★La structure vectorielle. (French) [Vector structure] 82a:15001
 Pounder, James R. See Klamkin, Murray S., 82k:15001
 Riedmüller, Bruno See Heinhold, Josef, 82m:15001
 Warusfel, A. See Mallavin-Brameret, Marie-Paule, 82j:15001b

secondary classifications:

- Hainzl, Josef ★Mathematik für Naturwissenschaftler. (German) [Mathematics for scientists] (82m:00008)
 Hungerford, Thomas W. ★Algebra. (82a:00006)
 Kostrikin, A. I. (with Manin, Ju. I.) ★Линейная алгебра и геометрия. (Russian) [Linear algebra and geometry] (82c:00008)
 Manin, Ju. I. See Kostrikin, A. I., (82c:00008)

15–02 Advanced exposition (research surveys, monographs, etc.)

- Cain, Bryan E. Inertia theory. 82c:15001
 Tausky, Olga Sets of complex matrices which can be transformed to triangular forms. 82b:15001

secondary classifications:

- Berman, Abraham (with Plemmons, Robert J.) ★Nonnegative matrices in the mathematical sciences. (82b:15013)
 Brualdi, Richard A. Matrices of zeros and ones with fixed row and column sum vectors. (82c:15019)
 Plemmons, Robert J. See Berman, Abraham, (82b:15013)

15–03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (Bašmakova, I. G.) See History and methodology of the natural sciences, (82c:01004)
 Henderson, Harold V. (with Searle, S. R.) On deriving the inverse of a sum of matrices. (82c:15005)
 Homenko, M. P. (with Vivrot, T. M.) Mutual interrelationship of the ideas of matrix theory and graph theory in their historical development. II. (Russian) (82k:01025)
 (Rybnikov, K. A.) See History and methodology of the natural sciences, (82c:01004)
 Searle, S. R. See Henderson, Harold V., (82c:15005)
 (Tjulina, I. A.) See History and methodology of the natural sciences, (82c:01004)
 Vivrot, T. M. See Homenko, M. P., (82k:01025)
 History and methodology of the natural sciences ★История и методология естественных наук. Вып. XXV. (Russian) [History and methodology of the natural sciences. No. XXV] (82c:01004)
 Natural sciences ★История и методология естественных наук. Вып. XXV. (Russian) [History and methodology of the natural sciences. No. XXV] (82c:01004)

15–04 Explicit machine computation and programs (not the theory of computation or programming)

- Kymn, Kern O. (with Norsworthy, J. R.; Okamoto, Tatsuo) The computation of the generalized inverse. 82i:15001
 Norsworthy, J. R. See Kymn, Kern O.; et al., 82i:15001
 Okamoto, Tatsuo See Kymn, Kern O.; et al., 82i:15001

secondary classifications:

- Huang, Lin Computation and perturbation estimation for the quadratic root of a positive definite matrix. (Chinese) (82j:15016)
 Kalaba, Robert (with Rasakho, Nima) Analytical aspects of computational linear algebra. (82k:34011)
 Rasakho, Nima See Kalaba, Robert, (82k:34011)

15–06 Proceedings, conferences, etc.

secondary classifications:

- (Straus, A. V.) See Functional analysis, (82h:47001)
 Functional analysis ★Функциональный анализ. Вып. 15. (Russian) [Functional analysis. No. 15] (82h:47001)

15A03 Vector spaces, linear dependence, rank

- Beasley, LeRoy B. Spaces of matrices of equal rank. 82m:15002
 Bu, Tor Partitions of a vector space. 82c:15002
 Constantin, Julien (with Courteau, Bernard) Partitions linéaires arguésiennes d'un espace vectoriel. (English summary) 82c:15003
 Courteau, Bernard See Constantin, Julien, 82c:15003
 Feinberg, Martin On a generalization of linear independence in finite-dimensional vector spaces. 82b:15001
 Jamison-Waldner, Robert E. Finding little hyperplanes in bigger ones. 82g:15001
 Marcus, Daniel A. Minimal positive 2-spanning sets of vectors. 82b:15002
 Robinson, Donald W. A proof of the Frobenius rank equality. 82c:15004

secondary classifications:

- Aguilella Almer, Joaquin See Burillo López, Pedro J., (82j:46027)
 Baur, Walter On the elementary theory of quadruples of vector spaces. (82g:03056)
 Burillo López, Pedro J. (with Aguilella Almer, Joaquin) Geometry of Gramians in Hilbert space. (Spanish. English summary) (82j:46027)

- Coufal, Oldřich Calculation of heterogeneous-system composition in the equilibrium state. (82a:80005)
- Dvorníček, Roberto Linear independence of "logarithms" in linear varieties. (82a:10038)
- Goldberg, Moshe S. (with Straus, Ernst G.) Combinatorial inequalities, matrix norms, and generalized numerical radii. (82c:05024)
- Harazitskii, A. B. Nonmeasurable Hamel bases. (Russian) (82c:28010)
- Hartwig, Robert E. A note on rank-additivity. (82m:15006)
- Jeter, Melvyn W. The infimum of a superadditive, n -homogeneous function. (82c:26010)
- Linial, Nathan (with Rothschild, Bruce L.) Incidence matrices of subsets—a rank formula. (82b:05011)
- Rothschild, Bruce L. See Linial, Nathan, (82b:05011)
- Straus, Ernst G. See Goldberg, Moshe S., (82c:05024)

15A04 Linear transformations, semilinear transformations

- Greub, W. H. The Cayley algebra and linear transformations of \mathbb{R}^d . 82j:15002
- Hill, Richard D. See Polukis, John A., 82i:15002
- Kim, Ki Hang (with Roush, Fred William) Generating all linear transformations. 82m:15003
- Polukis, John A. (with Hill, Richard D.) Completely positive and Hermitian-preserving linear transformations. 82i:15002
- Roush, Fred William See Kim, Ki Hang, 82m:15003
- Wong, Edward T. Polygons, circulant matrices, and Moore-Penrose inverses. 82m:15004
- Wong, W. J. Maps on simple algebras preserving zero products. I. The associative case. 82c:15002a
- Maps on simple algebras preserving zero products. II. Lie algebras of linear type. 82c:15002b

secondary classifications:

- Canfield, E. Rodney A Sperner property preserved by product. (82b:06001)
- Dawlings, R. J. H. The semigroup of singular endomorphisms of a finite-dimensional vector space. (82a:20075)
- Gracia, Juan M. Dimension of the solution spaces of the matrix equations $[A, [A, X]] = 0$ and $[A, [A, [A, X]]] = 0$. (82c:15031)
- Halperin, Israel (with Rosenthal, Peter) Burnside's theorem on algebras of matrices. (82b:15009)
- Karuppan Chetty, C. S. See Rathore, R. K. S., (82i:15011)
- Rathore, R. K. S. (with Karuppan Chetty, C. S.) Some angularity and inertia theorems related to normal matrices. (82i:15011)
- Rosenthal, Peter See Halperin, Israel, (82b:15009)
- Schröder, Eberhard M. Zur Kennzeichnung distanztreuer Abbildungen in nichteuklidischen Räumen. (English summary) (82b:51025)
- Száz, Árpád (with Száz, G.) Linear relations. (82b:15021)
- Száz, G. See Száz, Árpád, (82b:15021)

15A06 Linear equations

- Lorenz, Jens Resonance in equations with a diagonal field. 82k:15003
- Rohn, Jiri Interval linear systems with prescribed column sums. 82i:15003

secondary classifications:

- Abaffy, József A direct method class for the general solution of systems of linear equations. (Hungarian. English summary) (82b:65016)
- Berg, Lothar Stable solution of instable systems of linear equations with a band matrix. (82b:65024)
- Bhattacharyya, Shankar Prasad See de Souza, Eurice, (82i:93012)
- Brjuno, A. K. Investigation and solution of infinite systems of linear equations. (Russian) (82d:47017)
- Evans, David J. (with Hadjidimos, A.) Parallel solution to certain banded, symmetric and centro-symmetric systems by using the quadrant interlocking factorisation method. (82m:68053)
- Hadjidimos, A. Three-part splittings and Varga's type extensions of the successive overrelaxation (SOR) theory. (82a:65027)
- See also Evans, David J., (82m:68053)
- Jakovlev, M. F. Application of accelerations in a one-step iteration process with variable parameters. (Russian) (See 82i:65002)
- van Loon, J. N. M. Irreducibly inconsistent systems of linear inequalities. (82k:90078)
- Manteuffel, Thomas A. An incomplete factorization technique for positive definite linear systems. (82c:65019)
- Miranker, Willard L. (with Pan, Y. Ya.) Methods of aggregation. (82d:65036)
- Neumann, Michael The Kahan S.O.R. convergence bound for nonsingular and irreducible M -matrices. (82j:65021)
- Pan, Y. Ya. See Miranker, Willard L., (82d:65036)
- Richter, Gerhard Bemerkungen zu linearen Gleichungssystemen mit zufälligen Koeffizienten. (82c:60118)
- de Souza, Eurice (with Bhattacharyya, Shankar Prasad) Controllability and the linear equation $Ax = b$. (82i:93012)

15A09 Matrix inversion, generalized inverses

- Babikov, G. V. A theorem on matrix expansion and its applications to problems of linear algebra over skew fields. (Russian) 82f:15001
- Baróthy, B. On the stability of properties of the Moore-Penrose matrix inverse. 82c:15001
- Bell, C. Leary Generalized inverses of circulant and generalized circulant matrices. 82c:15003
- Berg, Lothar Über quasivertauschbare Matrixinversen. 82i:15004
- Verallgemeinerte Inversen nilpotenter Matrizen. [Generalized inverses of nilpotent matrices] 82j:15003

- Bevis, Jean H. (with Hall, Frank J.; Katz, Irving J.) Integer generalized inverses of incidence matrices. 82k:15004
- Biegler-König, Friedrich W. Sufficient conditions for the solubility of inverse eigenvalue problems. 82j:15007
- Campbell, Stephen L. (with Poole, George D.) Convergent regular splittings for nonnegative matrices. 82m:15005
- Cline, Randall E. Note on an extension of the Moore-Penrose inverse. 82k:15005
- Dogaru, O. C. Note sur l'extension de l'inverse généralisée d'un produit de matrices. 82f:15002
- Faddeev, D. K. Some properties of a matrix that is the inverse of a Hessenberg matrix. (Russian) 82c:15006
- Galperin, A. M. (with Waksman, Zeev) On pseudo-inverses of operator products. 82f:15003
- Hall, Frank J. (with Meyer, Carl D., Jr.) Corrigendum: "Generalized inverses of the fundamental bordered matrix used in linear estimation" [Sankhyā Ser. A 37 (1975), 428-438; MR 55 #10478]. 82a:15002
- (with Hartwig, Robert E.) Algebraic properties of governing matrices used in Cesàro-Neumann iterations. 82b:15004
- See also Bevis, Jean H.; et al., 82k:15004
- Hartwig, Robert E. Drazin inverses and canonical forms in $M_n(\mathbb{Z}/h)$. 82k:15005
- A note on rank-additivity. 82m:15006
- A method for calculating A^d . 82b:15005
- See also Hall, Frank J., 82b:15004
- Haynsworth, Emilie (with Wall, J. R.) Group inverses of certain positive operators. 82f:15004
- Henderson, Harold V. (with Searle, S. R.) On deriving the inverse of a sum of matrices. 82c:15005
- Jain, S. K. (with Snyder, L. E.) Nonnegative λ -monotone matrices. 82c:15002
- Katz, Irving J. See Bevis, Jean H.; et al., 82k:15004
- Kühnleind, O. Rang-1-Änderungen bei verallgemeinerten Inversen. [Rank-1 changes in generalized inverses] 82m:15007
- Meyer, Carl D., Jr. See Hall, Frank J., 82a:15002
- Miller, Kenneth S. On the inverse of the sum of matrices. 82f:15004
- Mitra, Sujit Kumar Generalized inverse of matrices and applications to linear models. (See 82f:62102)
- Okeke, C. C. On exact inversion of certain matrices by a recursive form of the Cayley-Hamilton theory [theorem]. 82m:15008
- Ouellette, Diane Valérie Schur complements and statistics. 82j:15005
- Poole, George D. See Campbell, Stephen L., 82m:15005
- Rao, C. Radhakrishna Matrix approximations and reduction of dimensionality in multivariate statistical analysis. 82c:15003
- Searle, S. R. See Henderson, Harold V., 82c:15005
- Shafroth, Chantal A generalization of the formula for computing the inverse of a matrix. 82j:15006
- Snyder, L. E. See Jain, S. K., 82c:15002
- Valerio, Vladimiro On the partitioned matrix $\begin{pmatrix} A & 0 \\ 0 & I \end{pmatrix}$ and its associated system $AX = T$, $A^*Y + QX = Z$. (French summary) 82i:15007
- Waksman, Zeev See Galperin, A. M., 82f:15003
- Wall, J. R. See Haynsworth, Emilie, 82f:15004
- Werner, Hans-Joachim On the matrix monotonicity of generalized inversion. 82k:15006
- Yang, Hung Chang On some order preserving properties of the generalized inverses of nonnegative definite matrices. 82b:15006

secondary classifications:

- Bakalary, Jerzy K. (with Kala, Radosław) The matrix equation $AXB + CYD = E$. (82c:15010)
- Campbell, Stephen L. (with Poole, George D.) Computing nonnegative rank factorizations. (82f:15009)
- Delsarte, Philippe (with Genin, Yves V.; Kamp, Yves G.) A method of matrix inverse triangular decomposition based on contiguous principal submatrices. (82f:65028)
- Dym, Harry (with Gohberg, Israel) Extensions of band matrices with band inverses. (82d:15006)
- Francis, N. D. Computation of generalised inverse of a special class of matrices. (82b:65029)
- Genin, Yves V. See Delsarte, Philippe; et al., (82f:65028)
- Gohberg, Israel See Dym, Harry, (82d:15006)
- Greville, T. N. E. (with Keyfitz, Nathan) Backward population projection by a generalized inverse. (82b:92031)
- Hallum, C. R. See McMath, John S.; et al., (82d:65043)
- Hartwig, Robert E. An application of the Moore-Penrose inverse to antisymmetric relations. (82a:16016)
- (with Putcha, Mohan S.) Semisimilarity for matrices over a division ring. (82i:15024)
- Hüseyin, Özyay See Özgüler, Bülent, (82f:68036)
- Kala, Radosław See Bakalary, Jerzy K., (82c:15010)
- Kamp, Yves G. See Delsarte, Philippe; et al., (82f:65028)
- Kéri, G. A tableau filling problem and its possible application to matrix inversion. (82c:90053)
- Keyfitz, Nathan See Greville, T. N. E., (82b:92031)
- Kynn, Kern O. (with Norsworthy, J. R.; Okamoto, Tatsuo) The computation of the generalized inverse. (82i:15001)
- Lenagan, T. H. On a theorem of Herstein and Small. (82b:16044)
- McMath, John S. (with Sims, S. E.; Hallum, C. R.) A comparison of various derivatives for matrix-valued functions. (82d:65043)
- Meyer, Carl D., Jr. (with Shoaf, James M.) Updating finite Markov chains by using techniques of group matrix inversion. (82d:60122)
- Norsworthy, J. R. See Kynn, Kern O.; et al., (82i:15001)
- Okamoto, Tatsuo See Kynn, Kern O.; et al., (82i:15001)
- Özgüler, Bülent (with Hüseyin, Özyay) On the inversion of multidimensional polynomial matrices. (82f:68036)

- Poole, George D. See Campbell, Stephen L., (82i:15009)
 Puteha, Mohan S. See Hartwig, Robert E., (82i:15024)
 Rao, C. Radhakrishna A lemma on G -inverse of a matrix and computation of correlation coefficients in the singular case. (82i:62087)
 Shoad, James M. See Meyer, Carl D., Jr., (82d:60122)
 Sims, S. E. See McMath, John S.; et al., (82d:65043)
 Smeets, Per A. Line digraphs and the Moore-Penrose inverse. (82c:05074)
 Wong, Edward T. Polygons, circulant matrices, and Moore-Penrose inverses. (82m:15004)

15A12 Conditioning of matrices [See also 65F35.]

- O'Leary, Dianne Prost Estimating matrix condition numbers. 82i:15006
 Symm, Hilary J. (with Wilkinson, J. H.) Almost defective matrices. 82m:15009
 Wilkinson, J. H. See Symm, Hilary J., 82m:15009

secondary classifications:

- Arzanyh, I. S. (with Gugnina, V. I.) New identities for square matrices. (Russian) (82i:15012)
 Burrus, W. R. (with Rust, B. W.; Cope, J. E.) Constrained interval estimation for linear models with ill-conditioned equations. (82a:65029)
 Cope, J. E. See Burrus, W. R.; et al., (82a:65029)
 Gugnina, V. I. See Arzanyh, I. S., (82i:15012)
 Holt, J. N. See O'Brien, D. M., (82i:65033)
 O'Brien, D. M. (with Holt, J. N.) The extension of generalized cross-validation to a multiparameter class of estimators. (82i:65033)
 Rust, B. W. See Burrus, W. R.; et al., (82a:65029)

15A15 Determinants, permanents, other special matrix functions

- Bautz, M. Über $(0, 1)$ -Determinanten mit großen Absolutwerten. [On $(0, 1)$ -determinants with large absolute values] 82m:15010
 Chan, G. H. (with Lim, M. H.) A conjecture involving generalized matrix functions. 82i:15004
 Chung, F. R. K. (with Diaconis, Persi; Graham, Ronald L.; Mallows, C. L.) On the permanents of complements of the direct sum of identity matrices. 82j:15008
 Cirulik, V. G. The resultant of ordinary linear difference operators. (Russian) 82d:15001
 Dale, P. See Vein, P. R., 82a:15005
 Dascalopoulos, D. See Maroulas, John, 82j:15011
 Datta, Biswa Nath Matrix equation, matrix polynomial and the number of zeros of a polynomial inside the unit circle. 82i:15005
 Diaconis, Persi See Chung, F. R. K.; et al., 82j:15008
 Egozyev, G. P. ★Решение проблемы ван-дер-Вардена для перманентов. (Russian) [Solution of the van der Waerden problem for permanents] 82i:15006
 New formulas for the permanent function. (Russian) 82i:15007
 Falkman, D. I. Proof of the van der Waerden conjecture on the permanent of a doubly stochastic matrix. (Russian) 82i:15007
 Foregger, Thomas H. Identities related to permanents of doubly stochastic matrices and series reduced trees. 82j:15009
 Graham, Ronald L. See Chung, F. R. K.; et al., 82j:15008
 Gyires, Béla The common source of several inequalities concerning doubly stochastic matrices. 82d:15002
 Kittappa, R. Proof of a conjecture of 1881 on permanents. 82i:15008
 Li, Kuo Wei (with Wang, Edward Tzu Hsia) Permanent affine subspaces of generalized doubly stochastic matrices. 82j:15002
 (with Wang, Edward Tzu Hsia) Monotonicity conjecture on permanents of doubly stochastic matrices. 82i:15003
 Lim, M. H. See Chan, G. H., 82i:15004
 van Lint, Jacobus Hendricus Notes on Egoritsjev's proof of the van der Waerden conjecture. 82m:15011
 London, David On the van der Waerden conjecture for matrices of rank two. 82h:15007
 On the Đoković conjecture for matrices of rank two. 82h:15008
 Monotonicity of permanents of certain doubly stochastic matrices. 82j:15010
 Mallows, C. L. See Chung, F. R. K.; et al., 82j:15008
 Maroulas, John (with Dascalopoulos, D.) Applications of the generalized Sylvester matrix. 82j:15011
 McDonald, John N. On some zero configurations associated with the van der Waerden conjecture. 82i:15008
 Minkus, Jerome Circulants and Horadam's sequences. 82i:15009
 Murthy, K. V. V. (with Ramachandran, Venkat) On the ranks of certain matrices. 82i:15008
 Nishi, Akihiro Notes on combinatorial properties of matrices. 82a:15003
 Ramachandran, Venkat See Murthy, K. V. V., 82i:15008
 Randall, T. J. (with Sharples, H.) A useful recurrence relation. 82i:15009
 Schrijver, A. (with Valiant, W. G.) On lower bounds for permanents. 82a:15004
 Sharples, H. See Randall, T. J., 82i:15009
 Stemberge, John R. (with Todd, John) On a trigonometrical sum. 82b:15002
 Styan, George P. H. On Lavoie's determinantal inequality. 82i:15009
 Suchan, Gerald E. Concerning the minimum of permanents on doubly stochastic circulants. 82m:15012
 Todd, John See Stemberge, John R., 82b:15002
 Valiant, W. G. See Schrijver, A., 82a:15004
 Vein, P. R. (with Dale, P.) Erratum: "Determinants, their derivatives and nonlinear differential equations" [J. Math. Anal. Appl. 74 (1980), no. 2, 599-634; MR 81f:15013]. 82a:15005
 Vu Anh Phuong Behavior of the permanent of a special class of doubly stochastic matrices. 82a:15006
 Wang, Edward Tzu Hsia See Li, Kuo Wei, 82a:15003 and 82j:15002
 Wang, Kai Resultants and group matrices. 82i:15004

secondary classifications:

- Agarwal, A. K. A theorem on the zeros of certain classical polynomials. (82d:33014)
 Bohte, Zvonimir Calculation of the derivative of the determinant. (Slovenian. English summary) (82d:65041)
 Böttcher, Albrecht (with Silbermann, Bernd) Notes on the asymptotic behavior of block Toeplitz matrices and determinants. (82j:47042)
 Bruaddi, Richard A. On Haber's minimum term rank formula. (82i:05019)
 Gasparjan, A. G. Application of multidimensional matrices to the investigation of polynomials. (Russian. Armenian summary) (82i:15035)
 Goldschlager, Leslie M. An approximation algorithm for computing the permanent. (82i:68066)
 Good, Irving J. Corrigenda: "A new formula for cumulants" [Math. Proc. Cambridge Philos. Soc. 78 (1975), no. 2, 333-337; MR 52 #6957]. (82m:62039)
 Griffiths, H. B. Cayley's version of the resultant of two polynomials. (82i:12020)
 Høholdt, Tom (with Justesen, Jørn) Determinants of a class of Toeplitz matrices. (82m:30005)
 James, G. D. (with Murphy, G. E.) The determinant of the Gram matrix for a Specht module. (82j:20025)
 Justesen, Jørn See Høholdt, Tom, (82m:30005)
 Kershaw, Donald Permanents in Fredholm's theory of integral equations. (82j:45001)
 Marques de Sá, E. Note on graphs and weakly cyclic matrices. (82i:05042)
 Multiple roots of diagonal multiples of a square matrix. (82h:15027)
 Murphy, G. E. See James, G. D., (82j:20025)
 Pate, Thomas H. An extension of an inequality involving symmetric products with an application to permanents. (82i:15019)
 Scott, David S. Solving sparse symmetric generalized eigenvalue problems without factorization. (82d:65039)
 Silbermann, Bernd Some remarks on the asymptotic behavior of Toeplitz determinants. (82j:47048)
 See also Böttcher, Albrecht, (82j:47042)

15A18 Eigenvalues, singular values, and eigenvectors

- Cao, Zhi Hao (with Zhang, Feng Gang) Direct methods for ordering eigenvalues of a real matrix. (Chinese. English summary) 82h:15009
 Đoković, Dragomir Ž. (with Malzan, Jerry) Perturbation of eigenvalues in $U(n)$ by pseudoreflections. 82a:15007
 Falk, S. Der Satz von Krylov-Bogoljubov für parameternormale Matrizenupel. 82i:15007
 Der Diagonalsatz, ein weitreichender Einschließungssatz für die Eigenwerte beliebiger Matrizen. I. 82g:15003
 Fox, David W. Changes in relative matrix eigenvalues. 82a:15008
 Gohberg, Israel (with Rodman, Leiba) On spectral analysis of nonmonic matrix and operator polynomials. II. Dependence on the finite spectral data. 82a:15009
 (with Lancaster, P.; Rodman, Leiba) Spectral analysis of selfadjoint matrix polynomials. 82i:15010
 Grünbaum, F. Alberto Eigenvectors of a Toeplitz matrix: discrete version of the prolate spheroidal wave functions. 82m:15013
 Gutman, Shaul (with Shwartz, G.) A root-clustering theorem. 82m:15014
 Karuppan Chetty, C. S. See Rathore, R. K. S., 82i:15011
 Khatri, C. G. Some optimization problems with applications to canonical correlations and sphericity tests. 82i:15005
 Koller, A. Determining the eigenvalues and eigenvectors of a matrix by the method of elementary transformations. (German summary) 82g:15004
 Kublanovskaja, V. N. The algorithm \mathcal{Q} and its properties. (Russian) 82b:15003
 Lancaster, P. See Gohberg, Israel; et al., 82i:15010
 László, Lajos A bandstructure-invariant deflation for real symmetric matrices. 82i:15006
 Matrix methods for polynomials. 82i:15011
 Malzan, Jerry See Đoković, Dragomir Ž., 82a:15007
 Mine, Henryk Inverse elementary divisor problem for nonnegative matrices. 82j:15012
 Mori, Yasuchika (with Shimemura, Etsujiro) On a shift of eigenvalues of a matrix by using a solution of an algebraic Riccati equation. 82h:15004
 Neumann, Michael See de Pillis, John, 82i:15010
 Neval, Paul G. Eigenvalue distribution of Toeplitz matrices. 82i:15012
 de Oliveira, G. N. Inverse eigenvalue problems for finite matrices. (Portuguese) 82a:15010
 de Pillis, John (with Neumann, Michael) A noncommutative spectral theorem for operator entried companion matrices. 82i:15010
 Pokrzywa, Andrzej Spectra of operators with fixed imaginary parts. 82a:15011
 Rathore, R. K. S. (with Karuppan Chetty, C. S.) Some angularity and inertia theorems related to normal matrices. 82i:15011
 Rodman, Leiba See Gohberg, Israel, 82a:15009 and 82i:15010
 Sanchez-Dehesa, J. Direct and inverse eigenvalue problems of Jacobi matrices in physics and biology. 82j:15013
 Shih, Chia C. See Wongtawatnugool, C.; et al., 82i:15008
 Shimemura, Etsujiro See Mori, Yasuchika, 82b:15004
 Shwartz, G. See Gutman, Shaul, 82m:15014
 Stecenko, V. Ja. Strengthening and further development of the theorems of A. Ostrowski on the nonsingularity of matrices. (Russian. Tajiki summary) 82i:15010
 Wang, Lie Heng Relation between eigenvalues and eigenvectors of the SOR matrix E_ω and the Jacobi matrix B . (Chinese. English summary) 82a:15012
 Wiff, Herbert S. An algorithm-inspired proof of the spectral theorem in E^n . 82h:15010
 Wongtawatnugool, C. (with Wu, Shi Yu; Shih, Chia C.) Eigenvalue problem for an infinite tridiagonal matrix. 82i:15008
 Wu, Shi Yu See Wongtawatnugool, C.; et al., 82i:15008
 Young, N. J. A bound for norms of functions of matrices. 82i:15011
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 Zhou, Bo Xun On the second eigenvalue of positive matrices. (Chinese. English summary) 82i:15013

secondary classifications:

- Agarwal, A. K. A theorem on the zeros of certain classical polynomials. (82d:33014)
- Arimoto, Suguru. See Monden, Yoshimi, (82k:94015)
- Barnes, Earl R. (with Hoffman, Alan J.) On bounds for eigenvalues of real symmetric matrices. (82k:15017)
- Bláha, Svatopluk. See Pudil, Pavel, (82k:68055)
- den Boer, H. (with Thijse, G. Philip A.) Semistability of sums of partial multiplicities under additive perturbation. (82f:47021)
- Bunse, Wolfgang. A class of diagonal transformation methods for the computation of the spectral radius of a nonnegative irreducible matrix. (82e:65043)
- Cain, Bryan E. Inertia theory. (82c:15001)
- Calogero, Francesco. Matrices, differential operators, and polynomials. (82g:33023)
- Chao, Chong Yun. A remark on the eigenvalues of generalized circulants. (82i:15024)
- Crewther, D. P. (with Hamer, C. J.) Eigenvalues for the massive Schwinger model from a finite-lattice Hamiltonian approach. (82a:81031)
- Eberlein, Patrick. A trace formula. (82c:43009)
- Ferguson, Warren E., Jr. The construction of Jacobi and periodic Jacobi matrices with prescribed spectra. (82c:65027)
- Gáspár, Zs. (with Popper, Györgi) Solution of an algebraic eigenvalue problem by partitioning into cells. (Russian) (82c:65037)
- Gibson, J. A. (with Hamilton-Jenkins, M. A.) Constrained system perturbation analysis. (82c:93005)
- Grünbaum, F. Alberto. Toeplitz matrices commuting with tridiagonal matrices. (82k:15019)
- Guralnick, Robert M. Triangularization of sets of matrices. (82d:15009)
- Hamer, C. J. See Crewther, D. P., (82a:81031)
- Hamilton-Jenkins, M. A. See Gibson, J. A., (82c:93005)
- Hartfil, D. J. Concerning the eigenvalues of DA under variations of the entries of D and A . (82c:15023)
- How a row change in a stochastic matrix affects the corresponding stochastic eigenvector. (82i:15022)
- Hoffman, Alan J. See Barnes, Earl R., (82k:15017)
- Johnson, Charles R. Row stochastic matrices similar to doubly stochastic matrices. (82g:15016)
- Kalaba, Robert (with Spingarn, K.; Tsefatson, Leigh) Variational equations for the eigenvalues and eigenvectors of nonsymmetric matrices. (82e:65038)
- Kolotilina, L. Ju. A class of test Hessenberg matrices. (Russian) (82i:15012)
- Longsine, D. E. (with McCormick, Stephen F.) Simultaneous Rayleigh-quotient minimization methods for $Ax = \lambda Bx$. (82b:65022)
- Makhoul, John. On the eigenvectors of symmetric Toeplitz matrices. (82m:94012)
- Marcus, Marvin (with Wang, Bo Ying) Some variations on the numerical range. (82d:47007)
- McCormick, Stephen F. See Longsine, D. E., (82b:65022)
- McFall, John D. On elementary divisors of the tensor product of two matrices. (82c:15032)
- Monden, Yoshimi (with Arimoto, Suguru) Generalized Rouché's theorem and its application to multivariate autoregressions. (82k:94015)
- de Oliveira, G. N. The characteristic values of the matrix $A + \lambda BX^{-1}$. (82b:65023)
- Paige, C. C. Accuracy and effectiveness of the Lanczos algorithm for the symmetric eigenproblem. (82b:65025)
- Popper, Györgi. See Gáspár, Zs., (82c:65037)
- Pudil, Pavel (with Bláha, Svatopluk) Evaluation of the effectiveness of features selected by discriminant analysis methods. (82k:68055)
- Spingarn, K. See Kalaba, Robert; et al., (82c:65038)
- Sussman-Fort, Stephen E. Inductor-capacitor one-ports and inverse eigenvalue problems. (82i:94023)
- Tsefatson, Leigh. See Kalaba, Robert; et al., (82c:65038)
- Thijse, G. Philip A. See den Boer, H., (82f:47021)
- Tong, Wen Ting. Disk theory for tensor products of matrices. (Chinese. English summary) (82c:15033)
- Wang, Bo Ying. See Marcus, Marvin, (82d:47007)
- Zhang, Jia Ju. Distributions of the eigenvalues of conjugate diagonal dominant matrices. (Chinese) (82c:65025)

15A21 Canonical forms, reductions, classification

- Balestrino, A. Circulant matrices and resolvent computation of a matrix in companion form. 82h:15011
- Barnett, Stephen. See Maroulas, John, 82h:15014
- Cannonito, Frank B. (with Hille, Einar) An elementary proof of the Jordan normal form theorem based on the resolvent. 82h:15012
- Dlab, Vlastimil (with Ringel, Claus Michael) A remark on normal forms of matrices. 82f:15007
- Finin, G. S. See Valčev, K. G., 82m:15016
- Galperin, A. M. (with Waksman, Zeev) An elementary approach to Jordan theory. 82h:15013
- Gow, Roderick. The equivalence of an invertible matrix to its transpose. 82f:15008
- Hille, Einar. See Cannonito, Frank B., 82h:15012
- Kim, Shoon K. Erratum: "A new method of matrix transformations. II. General theory of matrix diagonalizations via reduced characteristic equations and its application to angular momentum coupling" [J. Math. Phys. 20 (1979), no. 11, 2159-2167; MR 81j:15015b]. 82c:15009
- Klee, Victor (with Ladner, Richard E.) Qualitative matrices: strong sign-solvability and weak satisfiability. (See 82g:00016)
- Kolotilina, L. Ju. A class of test Hessenberg matrices. (Russian) 82i:15012
- Ladner, Richard E. See Klee, Victor, (See 82g:00016)
- Laffey, Thomas J. Simultaneous triangularization of a pair of matrices whose commutator has rank two. 82m:15015
- Lancaster, Kelvin. Maybe's "Sign solvability". (See 82g:00016)

London, David. A note on matrices with positive definite real part. 82d:15005

Maroulas, John (with Barnett, Stephen) Polynomials with respect to a general basis. I. Theory. 82h:15014a

(with Barnett, Stephen) Polynomials with respect to a general basis. II.

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Maybe, John S. Sign solvability. (See 82g:00016)

Ringel, Claus Michael. See Dlab, Vlastimil, 82f:15007

Rózsa, P. See Sinha, N. K., 82g:15005

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Uhlig, Frank. Inertia and eigenvalue relations between symmetrized and symmetrizing matrices for the real and the general field case. 82g:15006

Valčev, K. G. (with Finin, G. S.) On the splitting of a matrix spectrum. (Russian. English summary) 82m:15016

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Aganagic, Muhamed. On diagonal dominance in linear complementarity. (82m:90148)

Barker, George Phillip. The semigroup of row echelon matrices. (82g:20085)

Barnett, Stephen. Greatest common divisors from generalized Sylvester resultant matrices. (82c:12015)

Bass, D. W. Topological classification of endomorphisms of real line bundles. (82c:58085)

Topologically versal deformations of matrices; codimension at most two. (82c:58030)

Berman, Abraham (with Saunders, B. David) Matrices with zero line sums and maximal rank. (82i:15029)

(with Parlett, B. N.; Plemmons, Robert J.) Diagonal scaling to an orthogonal matrix. (82d:65040)

Bondarenko, V. M. (with Zavadskii, A. G.; Nazarova, L. A.) Representations of tame partially ordered sets. (Russian) (82m:16027)

Chaudhuri, Rita (with Mukherjee, A.) Idempotent Boolean matrices. (82g:04001)

Choi, Man Duen (with Laurie, Cecelia; Radjavi, Heydar) On commutators and invariant subspaces. (82d:47010)

Droz, Ju. A. Tame and wild matrix problems. (Russian) (82m:16028)

Fiedler, Miroslav (with Grone, Robert) Characterizations of sign patterns of inverse-positive matrices. (82i:15030)

Frost, M. G. (with Storey, Colin) Equivalence of matrices over $\mathbb{R}[s, z]$: a counterexample. (82m:93024)

Gohberg, Israel (with Rodman, Leiba) On spectral analysis of nonmonic matrix and operator polynomials. II. Dependence on the finite spectral data. (82a:15009)

Grone, Robert. See Fiedler, Miroslav, (82i:15030)

Hayanov, V. B. On the spectral properties of λ -matrices. (Russian) (82i:15020)

Laurie, Cecelia. See Choi, Man Duen; et al., (82d:47010)

Mukherjee, A. See Chaudhuri, Rita, (82g:04001)

Nazarova, L. A. See Bondarenko, V. M.; et al., (82m:16027)

Okoh, Frank. Indecomposable rank two modules over some Artinian ring. (82i:16038)

Parlett, B. N. See Berman, Abraham; et al., (82d:65040)

Plemmons, Robert J. See Berman, Abraham; et al., (82d:65040)

Radjavi, Heydar. See Choi, Man Duen; et al., (82d:47010)

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Saunders, B. David. See Berman, Abraham, (82i:15029)

Škabar, A. S. Commutative quivers of tame type. I. (Russian) (82m:16032)

Storey, Colin. See Frost, M. G., (82m:93024)

Stygar, Danuta. Transitive fibres of the tensor t_{ij} in the three-dimensional space X^3 . (82c:53030)

Zavadskii, A. G. See Bondarenko, V. M.; et al., (82m:16027)

15A23 Factorization of matrices

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Campbell, Stephen L. (with Poole, George D.) Computing nonnegative rank factorizations. 82f:15009

Cavaretta, A. S., Jr. (with Dahmen, Wolfgang A.; Micchelli, Charles A.; Smith, Philip W.) A factorization theorem for banded matrices. 82j:15014

Dahmen, Wolfgang A. See Cavaretta, A. S., Jr.; et al., 82j:15014

Derivoğlu, Ahmet (with Gökna, İzzet Cem) Determination of the state transition matrix of exponentially varying systems: algebraic methods. 82h:15005

Dobbins, J. Gregory. Factorization of a matrix group. 82h:15006

Dym, Harry (with Gohberg, Israel) Extensions of band matrices with band inverses. 82d:15006

Gohberg, Israel. See Dym, Harry, 82d:15006

Gökna, İzzet Cem. See Derivoğlu, Ahmet, 82h:15005

Gray, Len J. (with Wilson, D. G.) Nonnegative factorization of positive semidefinite nonnegative matrices. 82h:15007

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Martins, Luiz Carlos (with Podio-Guidugli, Paolo) A variational approach to the polar decomposition theorem. (Italian summary) 82i:15013

Micchelli, Charles A. See Cavaretta, A. S., Jr.; et al., 82j:15014

Nakamura, Tohgo. On the additive factorization of homogeneous polynomial matrices. 82c:15015

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- Podio-Guidugli, Paolo. See Martins, Luiz Carlos, 82i:15013
 Poole, George D. See Campbell, Stephen L., 82i:15009
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- Smith, Philip W. See Cavaretta, A. S., Jr.; et al., 82i:15014
 Wilson, D. G. See Gray, Len J., 82i:15007
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- Evans, David J. (with Hadjidimos, A.) On the factorization of special symmetric periodic and nonperiodic quidiagonal matrices. (German summary) (82e:65029)
 George, Alan (with Rashwan, Hamza) On symbolic factorization of partitioned sparse symmetric matrices. (82g:65020)
 (with Rashwan, Hamza) On symbolic factorization of partitioned sparse symmetric matrices. (82g:65019)
 Gow, Roderick The equivalence of an invertible matrix to its transpose. (82i:15008)
 Hadjidimos, A. See Evans, David J., (82e:65029)
 Kershaw, David S. On the problem of unstable pivots in the incomplete LU -conjugate gradient method. (82h:65017)
 Neuman, František Functions of two variables and matrices involving factorizations. (82e:26014)
 Radjavi, Heydar Proof of Ballantine's conjecture on simple cosquares. (82b:15011)
 Rashwan, Hamza See George, Alan, (82g:65019) and (82g:65020)
 Silverman, Leonard M. (with Van Dooren, Paul M.) A system theoretic interpretation for GCD extraction. (82m:93050)
 Van Dooren, Paul M. See Silverman, Leonard M., (82m:93050)
 Vardoulakis, Antonis I. G. Right divisors of numerator polynomial matrices and (A, B) -invariant subspaces. (82a:93030)

15A24 Matrix equations and identities

- Amitsur, S. A. On the characteristic polynomial of a sum of matrices. 82a:15014
 Arizanyh, I. S. (with Guginina, V. I.) New identities for square matrices. (Russian) 82c:15012
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 Barnett, Stephen Comments on "Kronecker product representation for the solution of the general linear matrix equation" [IEEE Trans. Automat. Control 25 (1980), no. 3, 563-564; MR 81h:15003] by R. J. Weidner and R. J. Mulholland. 82i:15011
 Bhattacharyya, Shankar Prasad See de Souza, Eurice, 82h:15021
 Crone, Lawrence Second order adjoint matrix equations. 82h:15016
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 (with Silverman, Leonard M.) The equation $\dot{X}R + QY = \Phi$: a characterization of solutions. 82c:15016
 Fahmy, Moustafa M. (with Hanafy, A. A. R.) Further corrections to: "Comments on 'On the Lyapunov matrix equation' [IEEE Trans. Automat. Control 19 (1974), 594-596; MR 58 # 10962a] by E. Y. Shapiro" [ibid. 20 (1975) no. 6, 814-815; MR 58 # 10962b] by J. J. Montemayor and B. F. Womack. 82i:15012
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 Guralnick, Robert M. Roth's theorems and decomposition of modules. 82h:15018
 Hanafy, A. A. R. See Fahmy, Moustafa M., 82i:15012
 Henderson, Harold V. (with Searle, S. R.) The vec-permutation matrix, the vec operator and Kronecker products: a review. 82h:15019
 Johnson, Charles R. (with Neumann, Michael) Square roots with positive definite Hermitian part. 82h:15008
 Kala, Radosław See Bakalary, Jerzy K., 82i:15010
 Karlin, Samuel Some matrix linear fractional transformations and their properties. 82i:15010
 Klorys, Constantine Fibonacci number identities from algebraic units. 82j:15015
 Kučera, Vladimir See Šebek, Michael, 82m:15020
 Lancaster, P. (with Rodman, Leiba) Existence and uniqueness theorems for the algebraic Riccati equation. 82c:15017
 Litvinov, A. P. Hankel and other matrices generated by rational fractions. (Russian) 82c:15013
 Magnus, Jan R. (with Neudecker, H.) The elimination matrix: some lemmas and applications. 82d:15007
 Mel'nik, O. M. Investigation of a system of matrix equations. (Russian. English summary) 82m:15019
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 Mulholland, Robert J. See Barnett, Stephen, 82i:15011
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 Prik, Vlastimil An equation of Lyapunov type. 82h:15020
 Rodman, Leiba On extremal solutions of the algebraic Riccati equation. 82g:15009
 See also Lancaster, P., 82c:15017
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 Šebek, Michael (with Kučera, Vladimir) Matrix equations arising in regulator problems. 82m:15020
 (Shapiro, Eliezer Y.) See Fahmy, Moustafa M.; et al., 82i:15012
 Silverman, Leonard M. See Emre, E., 82i:15016
 de Souza, Eurice (with Bhattacharyya, Shankar Prasad) Controllability, observability and the solution of $AX - XB = C$. 82h:15021
 Steeb, W.-H. (with Wilhelm, F.) Exponential functions of Kronecker products and trace calculation. 82h:15022
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- Wilhelm, F. See Steeb, W.-H., 82h:15022
 (Womack, Baxter F.) See Fahmy, Moustafa M.; et al., 82i:15012
 Young, N. J. The solution of Lyapunov's matrix equation by a geometric method. 82d:15008

secondary classifications:

- Barnett, Stephen Greatest common divisors from generalized Sylvester resultant matrices. (82c:12015)
 Brawley, J. V. (with Mullen, Gary L.) A note of equivalence classes of matrices over a finite field. (82h:15023)
 Denman, Eugene D. Roots of real matrices. (82i:65042)
 Falk, S. Der Satz von Krylov-Bogoljubov für parameternormale Matrizentupel. (82i:15007)
 Kabe, D. G. On solutions of linear matrix equations. (82j:62053)
 Ljasko, I. I. (with Makarov, V. L.; Šmanenko, T. L.) Algorithmic aspects of the method of summary representations. (Russian) (82e:65031)
 Makarov, V. L. See Ljasko, I. I.; et al., (82e:65031)
 Mullen, Gary L. See Brawley, J. V., (82h:15023)
 Reich, Ludwig (with Schwaiger, Jens) Linearisierung formal-biholomorpher Abbildungen und Iterationsprobleme. (82g:39008)
 Schwaiger, Jens See Reich, Ludwig, (82g:39008)
 Šmanenko, T. L. See Ljasko, I. I.; et al., (82e:65031)
 Toint, Ph. L. A sparse quasi-Newton update derived variationally with a nondiagonally weighted Frobenius norm. (82i:65028)
 Tuzik, A. I. Infinite systems of linear algebraic equations with coefficients of power growth. (Russian. English summary) (82e:65046)

15A27 Commutativity

- Chao, Chong Yun Some remarks on unipotent matrices. 82g:15010
 Guralnick, Robert M. Triangularization of sets of matrices. 82a:15009

15A30 Algebraic systems of matrices [See also 16A42, 20Gxx, 20Hxx.]

- Atkinson, M. D. (with Lloyd, Sherianne) Large spaces of matrices of bounded rank. 82a:15015
 de Caen, Dom (with Gregory, D. A.) Prime Boolean matrices. 82d:15010
 Datta, Biswa Nath Controllability, Bezoutian and relative primeness. 82c:15018
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 Halperin, Israel (with Rosenthal, Peter) Burnside's theorem on algebras of matrices. 82i:15009
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 Prasolov, V. V. Linear spaces in the general linear group. (Russian) 82i:15014
 Rosenthal, Peter See Halperin, Israel, 82i:15009
 Stafney, James D. Correction to: "Functions of a matrix and their norms" [Linear Algebra Appl. 20 (1978), no. 1, 87-94; MR 57 # 3162]. 82i:15011

secondary classifications:

- Conway, John B. Finite-dimensional points of continuity of Gen and Com. (82i:15017)
 Horoškin, S. M. Indecomposable representations of Lorentz groups. (Russian) (82k:22011)

15A33 Matrices over special rings (quaternions, finite fields, etc.)

- Brawley, J. V. (with Mullen, Gary L.) A note of equivalence classes of matrices over a finite field. 82h:15023
 (with Hankins, Max) On distribution by rank of bases for vector spaces of matrices over a finite field. 82i:15015
 Gustafson, William H. (with Moore, Marion E.; Reiner, Irving) Matrix completions over Dedekind rings. 82h:15013
 Hankins, Max See Brawley, J. V., 82i:15015
 Hartwig, Robert E. (with Putcha, Mohan S.) Semisimilarity for matrices over a division ring. 82h:15024
 Kaljuznyĭ, V. N. Singular numbers of operators in ultrametric Euclidean spaces. (Russian) 82d:15011
 Kung, Joseph P. S. The cycle structure of a linear transformation over a finite field. 82d:15012
 Moore, Marion E. See Gustafson, William H.; et al., 82h:15013
 Mullen, Gary L. Permutation matrices and matrix equivalence over a finite field. 82i:15016
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 Okoh, Frank Two classes of nonsingular matrices. 82b:15010
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 Radjavi, Heydar Proof of Ballantine's conjecture on simple cosquares. 82h:15011
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 Sjerpe, Denis Canonical forms for torsion matrices. 82k:15014
 Xie, Bang Jie Existence theorems for the canonical diagonal form and the weak canonical form of characteristic matrices over a skew field. (Chinese) 82k:15015
 Applications of characteristic roots and standard forms of matrices over a skew field. (Chinese) 82m:15021

secondary classifications:

- Babikov, G. V. A theorem on matrix expansion and its applications to problems of linear algebra over skew fields. (Russian) (82f:15001)
 Dobbins, J. Gregory Factorization of a matrix group. (82b:15006)
 Duchamp, Alain Formes bilinéaires symétriques sur un espace vectoriel de dimension finie sur le corps à deux éléments: applications aux matroïdes binaires. (English summary) (82c:05039)

- Formanek, Edward** (with Halpin, Patrick; Li, Wen Ch'ing Winnie) The Poincaré series of the ring of 2×2 generic matrices. (82i:16020)
Halpin, Patrick See **Formanek, Edward**; et al., (82i:16020)
Kim, Jin Bai On the semigroup of the circulant fuzzy matrices. (82i:20099)
Li, Wen Ch'ing Winnie See **Formanek, Edward**; et al., (82i:16020)
Roginskii, L. I. On a problem of N. G. Čebotarev. (Russian) (82i:12004)

15A36 Matrices of integers [See also 10M20.]

- Brualdi, Richard A.** Matrices of zeros and ones with fixed row and column sum vectors. (82i:15019)
Laquer, H. Turner Values of circulants with integer entries. (82i:15011)
Mahoney, Michael K. (with Newman, Morris) Determinants of abelian group matrices. (82i:15013)
Newman, Morris Determinants of circulants of prime power order. (82i:15020)
 See also **Mahoney, Michael K.**, (82i:15013)
Ochoa, J. An elementary model for the classes of ideals of an algebraic torus. (Spanish) (82i:15012a)
 An elementary model for the classes of ideals of an algebraic torus. II. (Spanish) (82i:15012b)
Rybina, I. A. Choice of a complete system of residues with respect to a one-sided ideal in a matrix ring. (Russian) (82i:15012)

secondary classifications:

- Anstee, Richard P.** Properties of $(0, 1)$ -matrices with forbidden configurations. (82i:05039)
Brualdi, Richard A. The diagonal hypergraph of a matrix (bipartite graph). (82i:05099)
 (with Ross, Jeffrey A.) Matrices with isomorphic diagonal hypergraphs. (82i:05094)
Hartwig, Robert E. Drazin inverses and canonical forms in $M_n(\mathbb{Z}/h)$. (82i:15005)
Istamov, A. M. The asymptotic behavior of second-order integer matrices lying in a given hyperbolic domain and belonging to a given residue class. (Russian) (82i:10069)
Kiriljuk, O. A. (with Rud'ko, V. P.) On finite irreducible solvable subgroups of group $GL(p, \mathbb{Z})$. (Russian. English summary) (82i:20052)
Lal, Sunder (with Nanda, V. C.) On coprime symmetric matrix pairs over algebraic number fields. (82i:10080)
Lomakina, Z. D. Voronoi's polyhedron $\Pi(n)$ for $n=5$ and maximal finite groups of integral 5×5 matrices. (Russian) (82i:10057)
 See also **Ryškov, S. S.**, (82i:20058)
Nanda, V. C. See **Lal, Sunder**, (82i:10080)
Ramanathan, K. G. (with Subbarao, M. V.) Some generalizations of Ramanujan's sum. (82i:10067)
Ross, Jeffrey A. See **Brualdi, Richard A.**, (82i:05094)
Rud'ko, V. P. See **Kiriljuk, O. A.**, (82i:20052)
Ryškov, S. S. (with Lomakina, Z. D.) A proof of the theorem on maximal finite groups of integral 5×5 matrices. (Russian) (82i:20058)
Sjerve, Denis Canonical forms for torsion matrices. (82i:15014)
Subbarao, M. V. See **Ramanathan, K. G.**, (82i:10067)
Tuler, Randy Subgroups of $SL_2 \mathbb{Z}$ generated by elementary matrices. (82i:10026)

15A39 Linear inequalities

- Truemper, K.** Complement total unimodularity. (82i:15014)

secondary classifications:

- Dušin, B. I.** (with Gol'fand, V. G.) Conditions for existence of a production line schedule. (Russian) (82i:90048)
Gol'fand, V. G. See **Dušin, B. I.**, (82i:90048)

15A42 Inequalities involving eigenvalues and eigenvectors

- Bhatia, Rajendra** On the rate of change of spectra of operators. II. (82i:15017)
Cohen, Joel E. Convexity of the dominant eigenvalue of an essentially nonnegative matrix. (82i:15016)
Fernandes Miranda, M. E. Note on the characteristic values and the three types of singular values of a complex matrix. (82i:15018)
Friedland, Shmuel The reconstruction of a symmetric matrix from the spectral data. (82i:15017)
 Convex spectral functions. (82i:15014)
Togawa, Yoshio A geometric study of the D -stability problem. (82i:15018)
Vitória, José Generalization of inequalities by Carmichael and Mason and by Parodi. (German summary) (82i:15013)
 Latent roots of lambda-matrices, Kronecker sums and matricial norms. (Czech summary) (82i:15019)

secondary classifications:

- Deutsch, Emeric** Bounds for the Perron root of a nonnegative irreducible partitioned matrix. (82i:15021)
Greville, T. N. E. Bounds for eigenvalues of Hermitian Trench matrices. (82i:65022)
Kokarev, V. N. Estimate of the maximum negative eigenvalue of the quadratic form $d^2[D(h_{ij}, h_{ij}^0, \dots, h_{ij}^0)]^{1/2}$. (Russian) (82i:10055)
Polkryzwa, Andrzej Spectra of operators with fixed imaginary parts. (82i:15011)
Thijse, G. Philip A. Rules for the partial multiplicities of the product of holomorphic matrix functions. (82i:15020)
Yamamoto, Tetsuro Error bounds for computed eigenvalues and eigenvectors. (82i:65028)

15A45 Miscellaneous inequalities involving matrices

- Bellman, Richard** Some inequalities for positive definite matrices. (82i:15021)
 Some consequences of the nonnegativity of the elements of the matrix exponential. (82i:15015)
Fiedler, Miroslav Minimal polynomial and the rank of principal submatrices of a matrix. (82i:15014)
Fischer, E. (with Scher, Peter) A remark on Schwarz' inequality. (82i:15022)
Gekeler, Eckart On the pointwise matrix product and the mean value theorem. (82i:15013)
Hartfiel, D. J. Concerning the eigenvalues of DA under variations of the entries of D and A . (82i:15023)
Marcus, Marvin (with Moore, Kenneth) A determinant formulation of the Cauchy-Schwarz inequality. (82i:15012)
Moore, Kenneth See **Marcus, Marvin**, (82i:15012)
Pate, Thomas H. An extension of an inequality involving symmetric products with an application to permanents. (82i:15019)
Scher, Peter See **Fischer, E.**, (82i:15022)

secondary classifications:

- Chuan, Jen Chung** (with Chuan, Wai Fong) On the generalized Hadamard product and the Jordan-Hadamard product. (82i:46074)
Chuan, Wai Fong See **Chuan, Jen Chung**, (82i:46074)
Johnson, P. D., Jr. (with Mohapatra, Ram Narayan) Problems in the theory of infinite matrices. (82i:40013)
Le Couteur, K. J. Representation of the function $\text{Tr}(\exp(A - \lambda B))$ as a Laplace transform with positive weight and some matrix inequalities. (82i:82019)
Marcus, Marvin Variations on the Cauchy-Schwarz inequality. (82i:15026)
McMath, John S. (with Sims, S. E.) Mean value theorems for a matrix valued derivative. (82i:65025)
Mohapatra, Ram Narayan See **Johnson, P. D., Jr.**, (82i:40013)
Sims, S. E. See **McMath, John S.**, (82i:65025)
Sparr, Gunnar A new proof of Löwner's theorem on monotone matrix functions. (82i:47021)
Young, N. J. A bound for norms of functions of matrices. (82i:15011)

15A48 Positive matrices and their generalizations

- Baksalary, Jerzy K.** (with Kala, Radosław) Two properties of a nonnegative definite matrix. (Russian summary) (82i:15020)
Berman, Abraham (with Plemmons, Robert J.) ★Nonnegative matrices in the mathematical sciences. (82i:15013)
Deutsch, Emeric Nonnegative spectraloid matrices. (82i:15025)
 Bounds for the Perron root of a nonnegative irreducible partitioned matrix. (82i:15021)
Fiedler, Miroslav Some combinatorial aspects in matrix theory and numerical algebra. (82i:15015)
Hartfiel, D. J. A general theory of measures for nonnegative matrices. (82i:15015)
Huang, Lin Computation and perturbation estimation for the quadratic root of a positive definite matrix. (Chinese) (82i:15016)
Jacobson, D. H. See **Martin, D. H.**, (82i:15024)
Kala, Radosław See **Baksalary, Jerzy K.**, (82i:15020)
Lewin, Mordechai Totally nonnegative, M -, and Jacobi matrices. (82i:15014)
 (with Vitek, Yehoshua) A system of gaps in the exponent set of primitive matrices. (82i:15026)
Marques de Sá, E. Multiple roots of diagonal multiples of a square matrix. (82i:15027)
Martin, D. H. (with Jacobson, D. H.) Copositive matrices and definiteness of quadratic forms subject to homogeneous linear inequality constraints. (82i:15024)
Plemmons, Robert J. See **Berman, Abraham**, (82i:15013)
Sinkhorn, Richard Power symmetric stochastic matrices. (82i:15017)
Smith, Ronald L. M -matrices whose inverses are stochastic. (82i:15028)
Trottenberg, Ulrich (with Winter, Gerd) On faces and W -irreducible operators in finite-dimensional linear spaces. (82i:15016)
Vitek, Yehoshua See **Lewin, Mordechai**, (82i:15026)
Winter, Gerd See **Trottenberg, Ulrich**, (82i:15016)

secondary classifications:

- Aharoni, Ron** Representing matrices. (82i:05038)
Bellman, Richard Some inequalities for positive definite matrices. (82i:15021)
Berman, Abraham Matrices and the linear complementarity problem. (82i:90116)
Campbell, Stephen L. (with Poole, George D.) Computing nonnegative rank factorizations. (82i:15009)
 (with Poole, George D.) Convergent regular splittings for nonnegative matrices. (82i:15005)
Cohen, Joel E. Convexity of the dominant eigenvalue of an essentially nonnegative matrix. (82i:15016)
DeAngelis, D. L. See **Travis, Curtis C.**; et al., (82i:92040)
Gyires, Béla The common source of several inequalities concerning doubly stochastic matrices. (82i:15002)
Haynsworth, Emilie (with Wall, J. R.) Group inverses of certain positive operators. (82i:15004)
Jeter, Melvyn W. (with Pye, W. C.) A note on nonnegative rank factorizations. (82i:15017)
Loewy, R. Extreme points of a convex subset of the cone of positive semidefinite matrices. (82i:52011)
Minc, Henryk Inverse elementary divisor problem for nonnegative matrices. (82i:15012)
Nishi, Akihiro Notes on combinatorial properties of matrices. (82i:15003)
Odlyzko, Andrew M. On the ranks of some $(0, 1)$ -matrices with constant row sums. (82i:05032)
Perkowski, J. See **Travis, Curtis C.**; et al., (82i:92040)
Poole, George D. See **Campbell, Stephen L.**, (82i:15009) and (82i:15005)

- Post, Wilfred M. See Travis, Curtis C.; et al., (82f:92040)
 Pye, W. C. See Jeter, Melvyn W., (82m:15017)
 Travis, Curtis C. (with Post, Wilfred M.; DeAngelis, D. L.; Perkowski, J.) Analysis of compensatory Leslie matrix models for competing species. (82f:92040)
 Wall, J. R. See Haynsworth, Emilie, (82j:15004)

15A51 Stochastic matrices

- Chang, Sun Yung A. A note on stochastic matrices. 82c:15016
 Cohen, Joel E. A geometric representation of a stochastic matrix: theorem and conjecture. 82j:15018
 Hartfiel, D. J. How a row change in a stochastic matrix affects the corresponding stochastic eigenvector. 82c:15022
 On the limiting set of stochastic products $xA_1 \cdots A_k$. 82c:15025
 Johnson, Charles R. Row stochastic matrices similar to doubly stochastic matrices. 82g:15016
 Landau, Henry J. (with Odlyzko, Andrew M.) Bounds for eigenvalues of certain stochastic matrices. 82m:15022
 Odlyzko, Andrew M. See Landau, Henry J., 82m:15022
 Schwarz, Stefan. Infinite products of doubly stochastic matrices. (Slovak and Russian summaries) 82c:15023
 Sinkhorn, Richard. Concerning the magnitude of the entries in a doubly stochastic matrix. 82c:15017

secondary classifications:

- Balasubramanian, K. Constancy of functions restricted to a subset. (82b:26027)
 Falkman, D. I. Proof of the van der Waerden conjecture on the permanent of a doubly stochastic matrix. (Russian) (82c:15007)
 Johansen, Søren (with Ramsey, Fred L.) A bang-bang representation for 3×3 embeddable stochastic matrices. (82b:60096)
 Li, Kuo Wei (with Wang, Edward Tzù Hsia) Permanent affine subspaces of generalized doubly stochastic matrices. (82g:15002)
 (with Wang, Edward Tzù Hsia) Monotonicity conjecture on permanents of doubly stochastic matrices. (82d:15003)
 London, David. Monotonicity of permanents of certain doubly stochastic matrices. (82j:15010)
 McDonald, John N. On some zero configurations associated with the van der Waerden conjecture. (82c:15008)
 Nawrotzki, Kurt. ★ Diskrete offene Systeme. (German) [Discrete open systems] (82f:60151)
 Nishi, Akihiro. Notes on combinatorial properties of matrices. (82a:15003)
 Ramsey, Fred L. See Johansen, Søren, (82b:60096)
 Smith, Ronald L. M -matrices whose inverses are stochastic. (82b:15028)
 Vu Anh Phuong. Behavior of the permanent of a special class of doubly stochastic matrices. (82a:15006)
 Wang, Edward Tzù Hsia. See Li, Kuo Wei, (82d:15003) and (82g:15002)

15A52 Random matrices

- Silverstein, Jack W. Describing the behavior of eigenvectors of random matrices using sequences of measures on orthogonal groups. 82c:15026
 secondary classifications:
 Girko, V. L. ★ Теория случайных детерминантов. (Russian) [Theory of random determinants] (82b:60002)
 Normalized spectral functions of random matrices. (Russian. English summary) (82d:60036)
 Distribution of eigenvalues and eigenvectors of unitary random matrices. (Russian. English summary) (82m:60076)
 Parring, A.-M. The limit distribution of sampling k -moments of a random vector. (82c:60050)

15A54 Matrices over function rings in one or more variables

- Bruening, James T. Minimizing the degree of polynomial inverses of rectangular matrices. 82g:15017
 Friedland, Shmuel. Analytic similarity of matrices. 82b:15014
 A generalization of the Motzkin-Taussky theorem. 82c:15027
 Gohberg, Israel (with Kaashoek, M. A.; Lerer, L. E.; Rodman, Leiba) Common multiples and common divisors of matrix polynomials. I. Spectral method. 82j:15019
 Hazanov, V. B. On the spectral properties of λ -matrices. (Russian) 82j:15020
 Kaashoek, M. A. See Gohberg, Israel; et al., 82j:15019
 Lerer, L. E. See Gohberg, Israel; et al., 82j:15019
 Rodman, Leiba. See Gohberg, Israel; et al., 82j:15019
 Thijssen, G. Philip A. Rules for the partial multiplicities of the product of holomorphic matrix functions. 82a:15020

secondary classifications:

- Ibarra, Oscar H. (with Moran, Shlomo; Rosier, Louis E.) Probabilistic algorithms and straight-line programs for some rank decision problems. (82m:68068)
 Moran, Shlomo. See Ibarra, Oscar H.; et al., (82m:68068)
 Rawlins, A. D. A note on the factorization of matrices occurring in Wiener-Hopf problems. (82a:15013)
 Rosier, Louis E. See Ibarra, Oscar H.; et al., (82m:68068)
 Rózsa, P. See Sinha, N. K., (82j:15005)
 Sinha, N. K. (with Rózsa, P.) Algorithm for transformation of a polynomial matrix to canonical form. (Russian summary) (82j:15005)

15A57 Other types of matrices (Hermitian, skew-Hermitian, etc.)

- Baksalary, Jerzy K. (with Kala, Radosław) Symmetrizers of matrices. 82a:15021
 Barnes, Earl R. (with Hoffman, Alan J.) On bounds for eigenvalues of real symmetric matrices. 82c:15017
 Caffisch, Russel E. An inverse problem for Toeplitz matrices and the synthesis of discrete transmission lines. 82c:15018
 Chao, Chong Yun. A remark on the eigenvalues of generalized circulants. 82c:15024
 Grünbaum, F. Alberto. Toeplitz matrices commuting with tridiagonal matrices. 82c:15019
 Hoffman, Alan J. See Barnes, Earl R., 82c:15017
 Kala, Radosław. See Baksalary, Jerzy K., 82a:15021
 Khalil, Hassan K. A new test for D -stability. 82b:15015
 Kljujnik, I. F. Cubic Hankel matrices. (Ukrainian. Russian summary) 82f:15015
 Kurth, Rudolf. Logarithms of real orthogonal matrices. 82a:15022
 Markham, Thomas L. Class G , and a unification problem. 82j:15021
 Melamud, E. Ja. Realization of positive matrix-valued functions according to Darlington. Polynomial realization in the case of degeneration. (Russian. Armenian and English summaries) 82f:15016
 Murthy, K. V. V. (with Ramachandran, Venkat) Bounds of the ranks of the real and imaginary parts of a Hermitian matrix. 82m:15023
 O, Ching Hyon. Simple π products of symmetric matrices and their sums. (Korean) 82g:15018
 Ramachandran, Venkat. See Murthy, K. V. V., 82m:15023
 Riera, T. How similarity matrices are? 82c:15018
 Sahnovič, A. L. Continuation of block Toeplitz matrices. (Russian) 82h:15029

secondary classifications:

- Berg, Lothar. Verallgemeinerte Inversen nilpotenter Matrizen. [Generalized inverses of nilpotent matrices] (82j:15003)
 Bhat, Kabekode V. S. An algorithm for matrix symmetrization. (82m:65036)
 Bräuninger, Jürgen. Linear programming by an effective method using triangular matrices. (82b:90072)
 Burnmeister, W. Optimal interval enclosing of certain sets of matrices, with application to monotone enclosing of square roots. (German summary) (82c:65044)
 Censor, Yair (with Herman, Gabor T.) Row-generation methods for feasibility and optimization problems involving sparse matrices and their applications. (82a:90082)
 Datta, Biswa Nath. Matrix equation, matrix polynomial and the number of zeros of a polynomial inside the unit circle. (82c:15005)
 Grünbaum, F. Alberto. Eigenvectors of a Toeplitz matrix: discrete version of the prolate spheroidal wave functions. (82m:15013)
 Herman, Gabor T. See Censor, Yair, (82a:90082)
 Hill, Richard D. See Polukis, John A., (82i:15002)
 Iohvidov, I. S. Extensions of rectangular Hankel matrices. (Russian) (82f:47036)
 James, D. G. (with Weisfeiler, Boris) On the geometry of unitary groups. (82c:10039)
 Kestenband, Barbu C. Unital intersections in finite projective planes. (82h:05013)
 Macfarlane, A. J. Parametrizations of unitary matrices and related coset spaces. (82c:22022)
 Martin, D. H. Finite criteria for conditional definiteness of quadratic forms. (82m:15028)
 Nakamura, Tohgo. On the additive factorization of homogeneous polynomial matrices. (82c:15015)
 Paige, C. C. Accuracy and effectiveness of the Lanczos algorithm for the symmetric eigenproblem. (82b:65025)
 Polukis, John A. (with Hill, Richard D.) Completely positive and Hermitian-preserving linear transformations. (82i:15002)
 Shih, Chia C. See Wongtawatnugool, C.; et al., (82c:15008)
 Weisfeiler, Boris. See James, D. G., (82c:10039)
 Wongtawatnugool, C. (with Wu, Shi Yu; Shih, Chia C.) Eigenvalue problem for an infinite tridiagonal matrix. (82c:15008)
 Wu, Shi Yu. See Wongtawatnugool, C.; et al., (82c:15008)

15A60 Norms of matrices, numerical range, applications of functional analysis to matrix theory [See also 65F35, 65J05.]

- Conway, John B. Finite-dimensional points of continuity of Gen and Com. 82f:15017
 Denman, Eugene D. (with Leyva-Ramos, J.) Spectral decomposition of a matrix using the generalized sign matrix. 82m:15024
 Lau, K. K. (with Riha, W. O. J.) Characterization of best approximations in normed linear spaces of matrices by elements of finite-dimensional linear subspaces. 82a:15023
 Leyva-Ramos, J. See Denman, Eugene D., 82m:15024
 Meinardus, Günter. On the sequence of the powers of a given matrix. 82j:15022
 Merikoski, Jorma Kaarlo. Lower bounds for $\|A\|_2$ by Hölder norms. 82c:15025
 On operator norms of submatrices. 82f:15018
 Submultiplicativity of some norms of matrices. (Russian) 82m:15025
 Poon, Yiu Tung. The generalized k -numerical range. 82a:15024
 Riha, W. O. J. See Lau, K. K., 82a:15023
 Tsing, Nam Kiu. On the shape of the generalized numerical ranges. 82m:15026
 Young, N. J. Matrices which maximise any analytic function. 82b:15016

secondary classifications:

- Bennett, Grahame. Lectures on matrix transformations of l^p spaces. (82f:47037)
 Bhatia, Rajendra. On the rate of change of spectra of operators. II. (82c:15017)
 Das, Kiran Chandra (with Embry-Wardrop, Mary) Orthogonality and the numerical range. II. (82h:47006)
 Deutsch, Emerie. Nonnegative spectraloid matrices. (82h:15025)
 Egorychev, G. P. New formulas for the permanent function. (Russian) (82c:15007)
 Embry-Wardrop, Mary. See Das, Kiran Chandra, (82h:47006)
 Huang, Lin. Computation and perturbation estimation for the quadratic root of a positive definite matrix. (Chinese) (82j:15016)

- Pokrzywa, Andrzej Spectra of operators with fixed imaginary parts. (82a:15011)
 Pták, Vlastimil (with Young, N. J.) Functions of operators and the spectral radius. (82e:47009)
 Roiter, A. V. BOCs with involution. (Russian) (82e:18003)
 Sell, George R. A characterization of finite-dimensional translation invariant spaces. (82e:47054)
 Sinkhorn, Richard Concerning the magnitude of the entries in a doubly stochastic matrix. (82e:15017)
 Young, N. J. See Pták, Vlastimil, (82e:47009)

15A63 Quadratic and bilinear forms, inner products [See mainly 10Cxx.]

- Čebyševa, B. P. See Mašanov, V. I., 82e:15029
 Davison, T. M. K. On Gleason's definition of quadratic forms. 82h:15030
 Đoković, Dragomir Ž. Extreme rays of certain cones of Hermitian forms. 82h:15031
 Gross, Herbert Formes quadratiques et formes non traciennes sur les espaces de dimension dénombrable. 82e:15028
 Kanzaki, Teruo A note on Witt groups for a Frobenius extension with involution. 82m:15027
 Kéri, G. On a class of quadratic forms. 82h:15017
 Martin, D. H. Finite criteria for conditional definiteness of quadratic forms. 82m:15028
 Mašanov, V. I. (with Čebyševa, B. P.) The group of motions of a space with a degenerate metric. (Russian) 82e:15029
 Obi, Gabriel M. M. Closed graph theorem for quadratic spaces. 82e:15030
 An algebraic extension of the Lax-Milgram theorem. 82d:15016
 Parimala, Raman Nonextended quadratic forms over polynomial rings over power series rings. 82m:15029
 Rätz, Jürg Zur Charakterisierung des Skalarproduktes. 82i:15026
 Tausky, Olga Composition of binary integral quadratic forms via integral 2×2 matrices and composition of matrix classes. 82m:15030

secondary classifications:

- Chowla, Sarvadaman (with Cowles, John R.; Cowles, M.) On the number of conjugacy classes in $SL(2, \mathbb{Z})$. (82e:10035)
 Cowles, John R. See Chowla, Sarvadaman; et al., (82e:10035)
 Cowles, M. See Chowla, Sarvadaman; et al., (82e:10035)
 Dajczer, Marcos (with Nomizu, Katsumi) On the boundedness of Ricci curvature of an indefinite metric. (82d:53039)
 Dutta, Biswa Nath Controllability, Bezoutian and relative primeness. (82c:15018)
 Davison, T. M. K. A functional equation for quadratic forms. (82a:39004)
 Duchamp, Alain Formes bilinéaires symétriques sur un espace vectoriel de dimension finie sur le corps à deux éléments: applications aux matroïdes binaires. (English summary) (82c:05039)
 Feig, Ephraim On systems of bilinear forms whose minimal division-free algorithms are all bilinear. (82c:10003)
 Ferland, Jacques A. Matrix-theoretic criteria for the quasiconvexity of twice continuously differentiable functions. (82k:26006)
 Fischer, E. (with Scherk, Peter) A remark on Schwarz' inequality. (82c:15022)
 Gohberg, Israel (with Lancaster, P.; Rodman, Leiba) Spectral analysis of selfadjoint matrix polynomials. (82c:15010)
 Ishibashi, Hiroyuki Decomposition of isometries of isotropic $U_q(V)$ over finite fields into simple isometries. (82h:20062)
 Jacobson, D. H. See Martin, D. H., (82c:15024)
 Ja' Ja', Joseph On the complexity of bilinear forms with commutativity. (82f:68049)
 Keller, Hans A. On the lattice of all closed subspaces of a Hermitian space. (82j:46029)
 Lancaster, P. See Gohberg, Israel; et al., (82c:15010)
 Martin, D. H. Conditional positivity of quadratic forms in Hilbert space. (82d:49070)
 (with Jacobson, D. H.) Copositive matrices and definiteness of quadratic forms subject to homogeneous linear inequality constraints. (82c:15024)
 Nomizu, Katsumi See Dajczer, Marcos, (82d:53039)
 Raman, Parimala (with Sridharan, R.) Quadratic forms over rings of dimension 1. (82i:13012)
 Rodman, Leiba See Gohberg, Israel; et al., (82c:15010)
 Scherk, Peter See Fischer, E., (82c:15022)
 Sergeičuk, V. V. Representations of simple involutive quivers. (Russian) (82m:16030)
 Sridharan, R. See Raman, Parimala, (82i:13012)
 Vlasov, V. V. Description of canonical coefficients of contraction of a quadratic form to a subspace of finite codimension. (Russian) (82c:46029)

15A66 Clifford algebras

- Asadova, M. Ju. A class of composition laws. (Russian) 82h:15018
 Crumeyrolle, Albert Algèbres de Clifford dégénérées et revêtements des groupes conformes affines orthogonaux et symplectiques. 82d:15017
 Salingaros, Nikos Clifford, Dirac, and Majorana algebras, and their representations. 82i:15027
 Realization, extension, and classification of certain physically important groups and algebras. 82j:15023

secondary classifications:

- Đoković, Dragomir Ž. Point-sequences on spheres and the Spin groups. (82f:22001)
 Kennedy, A. D. Clifford algebras in 2ω dimensions. (82h:81052)

15A69 Multilinear algebra, tensor products

- Gracia, Juan M. Dimension of the solution spaces of the matrix equations $[A, [A, X]] = 0$ and $[A, [A, [A, X]]] = 0$. 82c:15031
 Jakubowicz, Antoni (with Szmuksta, Maria) Necessary and sufficient conditions for the derivation in the tensor space of type (p, q) , $p+q \leq 4$, over two-dimensional vector

space [to] be the automorphism. 82m:15031

- Kuo, Wang Yueh O. On tensor products of linear homogeneous inequalities. 82m:15032
 McFall, John D. On elementary divisors of the tensor product of two matrices. 82e:15032
 Szmuksta, Maria See Jakubowicz, Antoni, 82m:15031
 Tong, Wen Ting Disk theory for tensor products of matrices. (Chinese. English summary) 82e:15033
 Wang, Kai Kronecker products of permutations and its applications to group matrices. 82f:15019
 Westwick, R. Real trivectors of rank seven. 82j:15024
 Yuzvinsky, Sergey Orthogonal pairings of Euclidean spaces. 82m:15033

secondary classifications:

- Bini, Dario Border rank of a $p \times q \times 2$ tensor and the optimal approximation of a pair of bilinear forms. (82e:68037)
 Pečarić, Josip E. On an inequality of T. Popoviciu. I, II. (82m:26020)

15A72 Vector and tensor algebra, theory of invariants

- Abeasis, Silvana The $GL(V)$ -invariant ideals in $S(S^2V)$. (Italian. English summary) 82f:15022
 Bieszk, Leon On the transitive fibres of a mixed tensor in the space X^3 . 82f:15020
 Canfield, E. Rodney (with Williamson, S. G.) Hook length products and Cayley operators of classical invariant theory. 82e:15019
 Chan, G. H. (with Lim, M. H.) Nonzero symmetry classes of smallest dimension. 82h:15019
 De Concini, Corrado (with Strickland, Elisabetta) Traceless tensors and the symmetric group. 82a:15025
 Désarménien, J. An algorithm for the Rota straightening formula. 82c:15034
 Gasparjan, A. G. Application of multidimensional matrices to the investigation of polynomials. (Russian. Armenian summary) 82i:15035
 Kamal, S. A. Determinant of general tensor. 82j:15025
 Lim, M. H. See Chan, G. H., 82h:15019
 Marcus, Marvin Variations on the Cauchy-Schwarz inequality. 82a:15026
 Servodio, Frank J. The $GL(V)$ -module structure of $S^r(S^2(V))$, symmetric tensors of degree r on symmetric tensors of degree r on V . 82f:15021
 Sobczyk, G. Conjugations and Hermitian operators in space time. 82c:15034
 Strickland, Elisabetta See De Concini, Corrado, 82a:15025
 Vust, Thierry Foncteurs polynomiaux et théorie des invariants. 82h:15020
 Williamson, S. G. Symmetry operators, polarizations, and a generalized Capelli identity. 82h:15032
 See also Canfield, E. Rodney, 82e:15019

secondary classifications:

- Adamović, O. M. Equidimensional representations of simple algebraic groups. (Russian) (82h:14033)
 de Boer, Reint (with Prediger, Hanshermann) ★Tensorrechnung in der Mechanik. (German) [Tensor calculus in mechanics] (82j:00021)
 Brauer, Richard Symmetrische Funktionen. Invarianten von linearen Gruppen endlicher Ordnung. (82i:13001)
 Edelen, Dominic G. B. Programs for computer implementation of the exterior calculus with applications to isovector calculations. (82f:58003)
 Grabmeier, Johannes Young-Alternation und Garnir-Relationen. (82g:20027)
 Greub, W. H. Pontrjagin classes and Weyl tensors. (82i:53034)
 Hadžiev, Dž. ★Теория инвариантов бинарных форм. (Russian) [Theory of invariants of binary forms] (82h:14048)
 Finite generation of algebras of invariants. (Russian) (82f:14047)
 Hess, Siegfried (with Köhler, Walter) ★Formeln zur Tensor-Rechnung. (German) [Formulas for tensor calculus] (82j:53001)
 Kang, Ming Chang Projective modules over some rings of invariants. (82h:13006)
 Köhler, Walter See Hess, Siegfried, (82j:53001)
 Makoha, A. N. A linear complex of planes associated with the trivector type (886; 410). (Russian) (82g:51002)
 Morikawa, Hisasi Some analytic and geometric applications of the invariant theoretic method. (82f:30049)
 Nakajima, Haruhisa Invariants of finite abelian groups generated by transvections. (82e:14058)
 Northcott, D. G. ★Affine sets and affine groups. (82c:14002)
 Prediger, Hanshermann See de Boer, Reint, (82j:00021)
 Rollero, Aldo Some remarks on certain invariants of a binary quartic form. (Italian. English and French summaries) (82d:14002)
 Seidenberg, A. On the functions invariant under the action of an algebraic group on an algebraic variety. (Italian summary) (82e:14059)
 Singh, Kuldeep A basis of a (G, σ) space and the derivation of some known results. (82h:20013a)
 Decomposition of the (G, σ) space as a tensor product. (82h:20013b)
 Sobczyk, G. Spacetime vector analysis. (82g:81027a)
 Algebraic classification of important tensors in physics. (82g:81027b)
 Springer, T. A. Invariant theory, old and new. (Dutch) (82g:14016)
 Taku, V. D. Centroaffine invariants of a three-dimensional system with quadratic nonlinearities. (Russian) (82h:34048)
 Comitants of a three-dimensional differential system with quadratic nonlinearities. (Russian) (82i:34006)
 Yuzvinsky, Sergey Orthogonal pairings of Euclidean spaces. (82m:15033)

15A75 Exterior algebra, Grassmann algebras

- O'Keeffe, J. D. A generalization of the vector product. 82m:15035
 Westwick, R. A representation theorem for real or complex bivectors. 82i:15028

secondary classifications:

- Atkins, R. H. An algebra for patterns on a complex. II. (82a:92068)
 Feunley-Sander, Desmond Affine geometry and exterior algebra. (82b:51004)
 Revoy, Philippe Groupes d'automorphismes d'algèbres graduées. (English summary) (82c:13010)
 Rogers, Alice A global theory of supermanifolds. (82a:58001)

15A78 Other algebras built from modules

- El-Agawany, Mohamed (with Micali, Artibano) Algèbre mesonique d'une forme bilinéaire symétrique. (English summary) 82m:15036
 Micali, Artibano See El-Agawany, Mohamed, 82m:15036

15A90 Applications to physics

- Rawlins, A. D. (with Williams, W. E.) Matrix Wiener-Hopf factorisation. 82e:15020
 Williams, W. E. See Rawlins, A. D., 82e:15020

secondary classifications:

- Ceulemans, A. See Vanquickenborne, L. G., (82c:81159)
 El-Agawany, Mohamed (with Micali, Artibano) Algèbre mesonique d'une forme bilinéaire symétrique. (English summary) (82m:15036)
 Kim, Shoon K. Erratum: "A new method of matrix transformations. II. General theory of matrix diagonalizations via reduced characteristic equations and its application to angular momentum coupling" [J. Math. Phys. 20 (1979), no. 11, 2159-2167; MR 81j:15015b]. (82c:15009)
 Micali, Artibano See El-Agawany, Mohamed, (82m:15036)
 Mighell, A. D. See Santoro, A.; et al., (82b:52018)
 Rodgers, J. R. See Santoro, A.; et al., (82b:52018)
 Santoro, A. (with Mighell, A. D.; Rodgers, J. R.) The determination of the relationship between derivative lattices. (82c:52018)
 Vanquickenborne, L. G. (with Ceulemans, A.) On the evaluation of matrix elements of symmetry operators in a determinantal basis. (82c:81159)

15A99 Miscellaneous topics

- Abbasov, N. T. Structure of algebras of biquasi-alternations and fundamental involutions in these algebras. (Russian) 82j:15026
 Amato, Vittorio Logarithm of a rectangular matrix with application to data analysis. (See 82f:62004)
 Berman, Abraham (with Saunders, B. David) Matrices with zero line sums and maximal rank. 82i:15029
 Fiedler, Miroslav (with Grone, Robert) Characterizations of sign patterns of inverse-positive matrices. 82i:15030
 Gohberg, Israel (with Levin, Sonia) On an open problem for block-Toeplitz matrices. 82m:15037
 Grone, Robert See Fiedler, Miroslav, 82i:15030
 Kaplenko, É. F. (with Ponomarev, V. A.) Binary relation of a nondegenerate quadruple of subspaces. (Russian) 82i:15018
 Levin, Sonia See Gohberg, Israel, 82m:15037
 Nel, D. G. On matrix differentiation in statistics. 82f:15023
 Ponomarev, V. A. See Kaplenko, É. F., 82i:15018
 Saunders, B. David See Berman, Abraham, 82i:15029
 Szász, Árpád (with Szász, G.) Linear relations. 82i:15021
 Szász, G. See Szász, Árpád, 82i:15021
 Tanaka, Chuji Some applications of the complex analysis to matrix functions. 82i:15020
 Watt, A. See Whitehead, R. R., 82i:15031
 Whitehead, R. R. (with Watt, A.) On the avoidance of cancellations in the matrix moment problem. 82i:15031
 Yang, Qi Bin (with Ye, Heng Qiang) The geometry of lattice planes. (Chinese. English summary) 82i:15033
 Ye, Heng Qiang See Yang, Qi Bin, 82i:15033

secondary classifications:

- Ando, T. Limit of iterates of cascade addition of matrices. (82b:93004)
 Antoulas, A. C. On canonical forms for linear constant systems. (82e:93021)
 Bell, D. J. (with Bryant, G. F.; Cook, P. A.; Crossley, T. R.; Denham, M. J.; Fallside, F.; Luntz, R.; MacFarlane, Alistair G. J.; Mayne, D. Q.; Munro, N.; Owens, D. H.; Rosenbrock, H. H.; Storey, Colin) ★Modern approaches to control system design. (82f:93060)
 de Boer, Carl What is the main diagonal of a bi-infinite band matrix? (82a:41014)
 Bryant, G. F. See Bell, D. J.; et al., (82f:93060)
 Buzycik, P. L. (with Freiman, G. A.) On the possibilities of solving combinatorial problems by analytic methods. (82m:10075)
 Cadogan, C. C. Graph-lattices and associated matrices. (82i:05052)
 Cook, P. A. See Bell, D. J.; et al., (82f:93060)
 Crossley, T. R. See Bell, D. J.; et al., (82f:93060)
 Delsarte, Philippe (with Genin, Yves V.; Kamp, Yves G.) Generalized Schur representation of matrix-valued functions. (82j:47044)
 Denham, M. J. See Bell, D. J.; et al., (82f:93060)
 Fallside, F. See Bell, D. J.; et al., (82f:93060)
 Fernando, K. V. M. (with Nicholson, H.) Karhunen-Loève expansion with reference to singular-value decomposition and separation of variables. (82j:94002)
 Fischer, Michael J. (with Paterson, Michael S.) The fast skew-closure algorithm. (82m:68065a)
 Frankl, Péter On large vector systems with equal scalar products. (82j:05022)
 Freiman, G. A. See Buzycik, P. L., (82m:10075)
 Genin, Yves V. See Delsarte, Philippe; et al., (82j:47044)

- Grigor'ev, D. Ju. Complexity of "wild" matrix problems and of the isomorphism of algebras and graphs. (Russian. English summary) (82c:03060)
 Iwahori, Nagayoshi The transition problem for lamp patterns—an application of elementary divisor theory. (Japanese. English summary) (82c:05041)
 Jaffe, S. (with Karcanias, N.) Matrix pencil characterization of almost (A, B) -invariant subspaces: a classification of geometric concepts. (82c:93007)
 Kamp, Yves G. See Delsarte, Philippe; et al., (82j:47044)
 Karcanias, N. See Jaffe, S., (82c:93007)
 Kawashima, Genkichi Sur la permutation et la rotation des matrices orthogonales. (82i:54013)
 Lokot', V. V. Projection operators with minimal norms in finite-dimensional spaces. (Russian) (82c:46028)
 Luntz, R. See Bell, D. J.; et al., (82f:93060)
 MacFarlane, Alistair G. J. See Bell, D. J.; et al., (82f:93060)
 Mayne, D. Q. See Bell, D. J.; et al., (82f:93060)
 Munro, N. See Bell, D. J.; et al., (82f:93060)
 Nicholson, H. See Fernando, K. V. M., (82j:94002)
 Obi, Gabriel M. M. Closed graph theorem for quadratic spaces. (82c:15030)
 Owens, D. H. See Bell, D. J.; et al., (82f:93060)
 Paterson, Michael S. See Fischer, Michael J., (82m:68065a)
 Petrovskii, G. N. Matrices that commute with their partial derivatives. (Russian. English summary) (82i:58007)
 de Pillis, John How to embrace your spectrum for faster iterative results. (82g:65021)
 Powers, David L. Matrix partitions of the vertices of a graph. (Italian. English summary) (82i:05081)
 Ramanan, S. A note on C. P. Ramanujam. (82j:01070)
 (Ramanujam, Chidambaram Padmanabhan) See Ramanan, S., (82j:01070)
 Redheffer, Raymond M. (with Smith, Carey) The case $n=2$ of the Goldberg-Straus inequality. (82c:05025)
 Riemenschneider, S. D. See Smith, Philip W., (82a:41026)
 Rosenbrock, H. H. See Bell, D. J.; et al., (82f:93060)
 Santoro, Nicola Four $O(n^2)$ multiplication methods for sparse and dense Boolean matrices. (82m:65039)
 Smith, Carey See Redheffer, Raymond M., (82c:05025)
 Smith, Philip W. (with Riemenschneider, S. D.) Approximation by discrete totally positive systems. (82a:41026)
 Storey, Colin See Bell, D. J.; et al., (82f:93060)
 Térouanne, Eric On a class of "impossible" figures: a new language for a new analysis. (82b:92046)

16-XX ASSOCIATIVE RINGS AND ALGEBRAS (For the commutative case, see 13-XX.)

16-01 Elementary exposition, textbooks

secondary classifications:

- Ehrlich, Gertrude See Goldhaber, Jacob K., (82a:00004)
 Goldhaber, Jacob K. (with Ehrlich, Gertrude) ★Algebra. (82a:00004)
 Hartley, Brian (with Hawkes, Trevor) ★Rings, modules and linear algebra. (82c:00001)
 Hawkes, Trevor See Hartley, Brian, (82c:00001)
 Hungerford, Thomas W. ★Algebra. (82a:00006)

16-02 Advanced exposition (research surveys, monographs, etc.)

- Andrunakievich, V. A. (with Rjabuhin, Ju. M.) ★Радикалы алгебр и структурная теория. (Russian) [Radicals of algebras and structural theory] 82a:16001
 Faith, Carl ★Algebra. I. Rings, modules, and categories. 82j:16001
 Kasch, Friedrich ★Модули и кольца. (Russian) [Modules and rings] 82m:16001
 Reiner, Irving An overview of integral representation theory. 82c:16001
 Rjabuhin, Ju. M. See Andrunakievich, V. A., 82a:16001
 (Skornjakov, L. A.) See Kasch, Friedrich, 82m:16001
 (Ursul, M. I.) See Kasch, Friedrich, 82m:16001
 (Zaharova, E. N.) See Kasch, Friedrich, 82m:16001

secondary classifications:

- Bryniski, Maciej (with Jurkiewicz, Jerzy) ★Zbiór zadań z algebry. (Polish) [A collection of problems in algebra] (82i:00009)
 Jurkiewicz, Jerzy See Bryniski, Maciej, (82i:00009)
 Ringel, Claus Michael On algorithms for solving vector space problems. I. Report on the Brauer-Thrall conjectures: Rojter's theorem and the theorem of Nazarova and Rojter. (82j:16055)
 On algorithms for solving vector space problems. II. Tame algebras. (82j:16056)

16-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Edwards, Harold M. The genesis of ideal theory. (82i:01028)

16-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Alder, A. (with Strassen, V.) On the algorithmic complexity of associative algebras. (82g:68038)
 Strassen, V. See Alder, A., (82g:68038)

16-06 Proceedings, conferences, etc.

- (Andrunakiev, V. A.) See Rings, algebras, modules, 82d:16001
- (Diab, Vlastimil) See Representation theory, 82a:16002a and Representation theory, 82a:16002b
- (Dubreil, Paul) See Seminar: Dubreil Paul-Malliavin, Marie-Paule, Algebra, 82i:16001
- (Gabriel, Peter) See Representation theory, 82a:16002a and Representation theory, 82a:16002b
- (Malliavin-Brameret, Marie-Paule) See Seminar: Dubreil Paul-Malliavin, Marie-Paule, Algebra, 82i:16001
- (Tomimaga, Hisao) See Proceedings: Symposium on Ring Theory, 82j:16001
- Algebras ★ Кольца, алгебры, модули. (Russian) [Rings, algebras, modules] 82d:16001
- Conference:
- Representations of Algebras ★ Representation theory. II. 82a:16002b
- Matsumoto ★ Proceedings of the 14th Symposium on Ring Theory. 82j:16001
- Modules ★ Кольца, алгебры, модули. (Russian) [Rings, algebras, modules] 82d:16001
- Ottawa, Ont. ★ Representation theory. I. 82a:16002a
- ★ Representation theory. II. 82a:16002b
- Paris ★ Séminaire d'algèbre Paul Dubreil et Marie-Paule Malliavin, 33ème Année. [Paul Dubreil and Marie-Paule Malliavin Algebra Seminar, 33rd Year] 82i:16001
- Potchefstroom ★ Algebra Symposium. 82i:16002
- Proceedings:
- Symposium on Ring Theory ★ Proceedings of the 14th Symposium on Ring Theory. 82j:16001
- Representation theory ★ Representation theory. I. 82a:16002a
- ★ Representation theory. II. 82a:16002b
- Rings, algebras, modules ★ Кольца, алгебры, модули. (Russian) [Rings, algebras, modules] 82d:16001
- Seminar:
- Dubreil Paul-Malliavin, Marie-Paule, Algebra ★ Séminaire d'algèbre Paul Dubreil et Marie-Paule Malliavin, 33ème Année. [Paul Dubreil and Marie-Paule Malliavin Algebra Seminar, 33rd Year] 82i:16001
- Skew polynomial rings, group rings and related topics ★ Skew polynomial rings, group rings and related topics. 82k:16001
- Symposium:
- Algebra ★ Algebra Symposium. 82i:16002
- Ring Theory ★ Proceedings of the 14th Symposium on Ring Theory. 82j:16001
- Skew Polynomial Rings, Group Rings and Related Topics ★ Skew polynomial rings, group rings and related topics. 82k:16001
- Workshop:
- Present Trends in Representation Theory ★ Representation theory. I. 82a:16002a
- secondary classifications:

- (Durakov, B. K.) See All-Union Conference: Algebra, (82h:20001b)
- (Kervaire, Michel) See Brauer group, (82c:14004)
- (Ojanguren, Manuel) See Brauer group, (82c:14004)
- Algebra ★ XV Всесоюзная Алгебраическая Конференция. Часть Вторая. (Russian) [Fifteenth All-Union Algebra Conference. Part II] (82h:20001b)
- Algebraic groups ★ Lie algebras, algebraic groups and related topics. (Japanese) (82a:17001)
- All-Union Conference:
- Algebra ★ XV Всесоюзная Алгебраическая Конференция. Часть Вторая. (Russian) [Fifteenth All-Union Algebra Conference. Part II] (82h:20001b)
- Brauer group ★ Groupe de Brauer. (French) [The Brauer group] (82c:14004)
- Colloquium:
- Algebra ★ Colloque d'Algèbre. (French) [Algebra Colloquium] (82m:13001)
- Krasnoyarsk ★ XV Всесоюзная Алгебраическая Конференция. Часть Вторая. (Russian) [Fifteenth All-Union Algebra Conference. Part II] (82h:20001b)
- Les Plans-sur-Bex ★ Groupe de Brauer. (French) [The Brauer group] (82c:14004)
- Lie algebras, algebraic groups and related topics ★ Lie algebras, algebraic groups and related topics. (Japanese) (82a:17001)
- Rennes ★ Colloque d'Algèbre. (French) [Algebra Colloquium] (82m:13001)
- Semigroups and related topics ★ Semigroups and related topics. (Japanese) (82a:20002)
- Seminar:
- Brauer Group ★ Groupe de Brauer. (French) [The Brauer group] (82c:14004)
- Symposium:
- Lie Algebras, Algebraic Groups and Related Topics ★ Lie algebras, algebraic groups and related topics. (Japanese) (82a:17001)
- Semigroups and Related Topics ★ Semigroups and related topics. (Japanese) (82a:20002)

16A02 Integral domains, unique factorization domains (noncommutative)

- Rauf Qureshi, M. A. Rings embeddable in a right field. 82b:16001

secondary classifications:

- Jacobinski, H. ★ Maximalordnungen und erbliche Ordnungen. (German) [Maximal orders and hereditary orders] (82j:16006)

16A03 Graded algebras, rings and modules

- Doković, Dragomir Ž. Superlinear algebra or two-graded algebraic structures. 82c:16002
- Kobayashi, Yuji Another graded algebra with a nonrational Hilbert series. 82j:16002
- Montgomery, Susan X -inner automorphisms of filtered algebras. 82j:16002
- van Oystaeyen, F. (with Verschoren, A.) Graded P.I. rings and noncommutative projective schemes. 82g:16003
- (with Verschoren, A.) Fully bounded Grothendieck categories. II. Graded modules. 82j:16003

- Ulbrich, K.-H. Vollgraduierte Algebren. [Fully graded algebras] 82m:16002
- Verschoren, A. See van Oystaeyen, F., 82g:16003 and van Oystaeyen, F., 82j:16003

secondary classifications:

- Gabber, Ofer The integrability of the characteristic variety. (82j:58104)
- Huckaba, James A. (with Keller, James M.) The integral closure of a graded ring. (82j:13006)
- Keller, James M. See Huckaba, James A., (82j:13006)

16A04 Noncommutative principal ideal rings, rings with a division algorithm

- Lesieur, Léonce Sur les anneaux premiers principaux à gauche. 82a:16003
- Smith, P. F. Rings with every proper image a principal ideal ring. 82f:16001
- Szeto, George (with To, T. O.) The p.p. ring and the Pierce sheaf representation of noncommutative rings. (Russian summary) 82a:16004
- To, T. O. See Szeto, George, 82a:16004

16A05 Skew polynomial rings, power series rings

- Cauchon, Gérard Idéaux bilatères et centre des anneaux de polynômes de Ore sur les anneaux quasi-simples. 82c:16001
- Doneddu, Alfred Anneaux hexaphiques d'une variable. (English summary) 82b:16001
- Egele, U. See Sharma, C. S., 82i:16003
- Ikehata, Shūichi On separable polynomials and Frobenius polynomials in skew polynomial rings. 82a:16005
- Jooste, T. de W. Homomorphisms in noncommutative power series rings. (See 82i:16002)
- Nagahara, Takasi A note on separable polynomials in skew polynomial rings of automorphism type. 82a:16006
- Rauf Qureshi, M. A. Ore extensions of an entire ring. 82d:16002
- Sharma, C. S. (with Egele, U.) Some properties of the operator algebra generated by Hodge's star and the exterior derivative. 82i:16003
- Wexler-Kreindler, Elena Séries formelles tordues et conditions de chaînes. 82a:16007

secondary classifications:

- Bedi, Surinder Singh (with Ram, Jai) Jacobson radical of skew polynomial rings and skew group rings. (82d:16006)
- Cardon, A. (with Crochemore, M.) Détermination de la représentation standard d'une série reconnaissable. (English summary) (82m:68076)
- Cheatham, Thomas J. (with Enochs, E.) c -commutativity. (82i:16037)
- Crochemore, M. See Cardon, A., (82m:68076)
- Enochs, E. See Cheatham, Thomas J., (82i:16037)
- Gabber, Ofer The integrability of the characteristic variety. (82j:58104)
- Huë, Tran Trong (with Szász, Ferenc A.) On the radical classes determined by regularities. (82k:16006)
- Ihrig, Edwin C. (with Ismail, Mourad E. H.) On an umbral calculus. (82b:13010)
- Ismail, Mourad E. H. See Ihrig, Edwin C., (82b:13010)
- Pearson, K. R. (with Stephenson, W.; Watters, J. F.) Skew polynomials and Jacobson rings. (82j:16058)
- Puczyłowski, Edmund R. Radicals of polynomial rings, power series rings and tensor products. (82a:16013)
- Ram, Jai See Bedi, Surinder Singh, (82d:16006)
- Reutenauer, Christophe Une bibliographie sur les séries formelles en variables non commutatives. (82g:00003)
- Salomaa, Arto Formal power series in noncommuting variables. (82b:68048)
- Stephenson, W. See Pearson, K. R.; et al., (82j:16058)
- Szász, Ferenc A. See Huë, Tran Trong, (82k:16006)
- Von Kanel, Pierre A. Generators of principal left ideals in a noncommutative algebra. (82g:94019)
- Watters, J. F. See Pearson, K. R.; et al., (82j:16058)
- Wexler-Kreindler, Elena Skew power series rings and some homological properties of filtered rings. (82f:16030)

16A06 Free algebras, free ideal rings (firs) and their generalizations [See also tensor algebra in 15A72.]

- Isbell, John Submodules of free modules. 82g:16013
- Menal, Pere The monoid rings that are Bezout domains. 82j:16004

secondary classifications:

- Berline, Chantal Elimination of quantifiers for nonsemisimple rings of characteristic p . (82k:03034)
- Cohn, P. M. Modules and matrices. (See 82i:16002)
- (with Dicks, Warren) On central extensions of skew fields. (82m:16014)
- On a theorem from Skew field constructions. (82k:16025)
- Dicks, Warren See Cohn, P. M., (82m:16014)
- Gerasimov, V. N. Inverting homomorphisms of rings. (Russian) (82d:16003)
- Tonor, Ivan K. Some properties of the product of varieties of associative algebras. (Russian) (82j:08012)

16A08 Rings of quotients, noncommutative localization

- Babkov, O. K. Algebraic extensions of rings and of a ring of quotients. (Russian) 82j:16005
- Beauchy, John A. Inversive localization at semiprime Goldie ideals. 82k:16002
- Gerasimov, V. N. Inverting homomorphisms of rings. (Russian) 82d:16003
- Haghany, A. (with Sarath, B.) Krull dimension and reflexivity in some Noetherian rings. 82m:16003

- Heinicke, A. G. Localization and completion at primes generated by normalizing sequences in right Noetherian rings. **82j:16006**
- Ikeyama, Tamotsu Four-fold torsion and rings of fractions. **82g:16004**
- Izawa, Tatsuo Maximal quotient rings of endomorphism rings of $E(R_A)$ -torsionfree generators. **82m:16004**
- Jambor, P. Rationally complete semiprimary rings of index two. **82i:16004**
- Năstăsescu, Constantin Modules injectifs de type fini par rapport à une topologie additive. **82e:16002**
- Anneaux de quotients et modules $\Sigma(\Delta)$ -injectifs. **82j:16007**
- Page, S. S. Perfect and π -regular quotient rings. **82c:16003**
- Sarah, B. See Haghighi, A., **82m:16003**
- Small, Lance W. (with Stafford, J. T.) Localisation and completions of Noetherian PI algebras. **82k:16003**
- Stafford, J. T. See Small, Lance W., **82k:16003**
- Upham, Mary H. Right localizable multiplicative sets and prime ideals of FBN rings. **82i:16005**
- Yammine, Sleiman Localisation des idéaux semi-premiers et extension des scalaires dans les algèbres noethériennes sur un corps. **82a:16006**
- secondary classifications:
- Björk, J.-E. ★ Rings of differential operators. **(82g:32013)**
- Claude, Daniel Realizations and transfer functions of discrete-time nonlinear homogeneous systems. **(82h:93016)**
- Hwang, Suk Geun Some aspect of rings of quotients. **(82e:16020)**
- Jategaonkar, Arun Vinayak Morita duality and Noetherian rings. **(82j:16036)**
- Jensen, Christian U. Propriétés homologiques et logiques des anneaux de fonctions entières. (English summary) **(82k:30057)**
- Malliavin-Brameret, Marie-Paule Caténarité et théorème d'intersection en algèbre non commutative. **(82f:17010)**
- Močkof, Jiri On σ -ideals of groups of divisibility. **(82m:13002)**
- Smith, S. P. The primitive factor rings of the enveloping algebra of $\mathfrak{sl}(2, \mathbb{C})$. **(82i:17016)**
- Steinberg, Stuart A. Lattice-ordered modules of quotients. **(82e:06019)**

16A10 Noncommutative local rings

- Vidal, Robert Anneaux de valuation discrète complets non commutatifs. **82j:16008**

secondary classifications:

- Rytkin, A. S. Finite local rings of principal ideals. (Russian) **(82a:16024)**

16A12 Prime and semiprime rings

- Agapitov, K. V. On epimorphic images of bounded Dedekind prime rings. (Russian. English summary) **82b:16002**
- Burkov, V. D. Differentially prime rings. (Russian) **82f:16002**
- Deshpande, V. K. Completions of Noetherian hereditary prime rings. **82e:16003**
- Marubayashi, Hidetoshi Completions of hereditary Noetherian prime rings. **82b:16003**
- Nicholson, W. K. (with Watters, J. F.) Normal classes of rings and tensor products. **82e:16002**
- Page, S. S. Orthogonality in modules. **82b:16004**
- Radnev, Petko Projective objects in a category of p -rings. (Russian) **82j:16009**
- Raphael, R. Fully idempotent factorization rings. **82b:16005a**
- Erratum: "Fully idempotent factorization rings". **82b:16005b**
- A class of rings with an arithmetic. **82i:16006**
- Watters, J. F. See Nicholson, W. K., **82b:16002**

secondary classifications:

- Beidar, K. I. Modules over commutative semiprime rings. (Russian) **(82i:13019)**
- Jøndrup, S. Homological dimensions of some P.I. rings. **(82f:16013)**
- Lesieur, Léonce Sur les anneaux premiers principaux à gauche. **(82a:16003)**
- Nishida, Kenji On hereditary Noetherian prime rings. (See **82f:20008**)
- Resco, Richard Radicals of finite normalizing extensions. **(82f:16005)**
- Smith, P. F. Rings with every proper image a principal ideal ring. **(82f:16001)**

16A14 Noncommutative analogues of Dedekind and Prüfer domains

- Drozd, Ju. A. Modules over hereditary orders. (Russian) **82j:16010**
- Kirkman, Ellen E. (with Kuzmanovich, James) Hereditary finitely generated algebras satisfying a polynomial identity. **82k:16004**
- Kuzmanovich, James See Kirkman, Ellen E., **82k:16004**
- Marubayashi, Hidetoshi Modules over Dedekind prime rings. V. **82b:16006**
- Pure injective modules over hereditary Noetherian prime rings with enough invertible ideals. **82g:16005**
- Nauwelaerts, E. (with van Oystaeyen, F.) Birational hereditary Noetherian prime rings. **82a:16009**
- van Oystaeyen, F. See Nauwelaerts, E., **82a:16009**

secondary classifications:

- Deshpande, V. K. Completions of Noetherian hereditary prime rings. **(82e:16003)**

16A15 Other generalizations of commutative rings (For commutativity theorems, see 16A70.)

- Miyashita, Yôichi On a Krull order. **82b:16003**

secondary classifications:

- Raphael, R. A class of rings with an arithmetic. **(82i:16006)**

16A16 Separable algebras, Azumaya algebras and their generalizations [See also 12Gxx, 13A20.]

- Deegan, A. P. A subgroup of the generalised Brauer group of Γ -Azumaya algebras. **82j:16011**
- Estrada Navas, Luis Brauer algebras. (Spanish. English summary) **82f:16003**
- Ikehata, Shûichi On separable polynomials in skew polynomial rings. **82c:16004**
- Note on Azumaya algebras and H -separable extensions. **82j:16012**
- Azumaya algebras and skew polynomial rings. **82j:16013**
- Orzech, Morris Correction to: "On the Brauer group of algebras having a grading and an action" [Canad. J. Math. **28** (1976), no. 3, 533-552; MR **53** #8115]. **82j:16014**
- Saltman, David J. The Brauer group is torsion. **82c:16005**
- Sugano, Kozo Note on cyclic Galois extensions. **82j:16015**

secondary classifications:

- Fein, Burton (with Schacher, Murray) Relative Brauer groups. I. **(82f:12027)**
- Hürlimann, W. Sur le groupe de Brauer d'un anneau de polynômes en caractéristique p et la théorie des invariants. **(82k:13005)**
- Lee, Heisook Azumaya algebras of a complex analytic space. **(82m:32009)**
- van Oystaeyen, F. Graded Azumaya algebras and Brauer groups. **(82d:13004)**
- Schacher, Murray See Fein, Burton, **(82f:12027)**
- Sugano, Kozo Note on automorphisms in separable extension of noncommutative ring. **(82c:16035)**
- On a special type of Galois extensions. **(82c:16036)**

16A18 Orders, arithmetic in algebras [See also 12A80, 12B35.]

- Beachy, John A. Weak ideal invariance and orders in Artinian rings. **82e:16004**
- Butler, M. C. R. The construction of almost split sequences. II. Lattices over orders. **82d:16004b**
- The construction of almost split sequences. I. **82d:16004a**
- Chatters, A. W. (with Robson, J. C.) Decomposition of orders in semiprimary rings. **82c:16006**
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 Lorenz, Martin (with Passman, D. S.) Prime ideals in crossed products of finite groups. 82j:16042a
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 Passman, D. S. See Lorenz, Martin, 82j:16042
 Pearson, K. R. (with Stephenson, W.; Watters, J. F.) Skew polynomials and Jacobson rings. 82j:16058
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secondary classifications:

- Bit-David, J. (with Robson, J. C.) Normalizing extensions. I. (82b:16022a)
 Normalizing extensions. II. (82b:16022b)
 Heinicke, A. G. Localization and completion at primes generated by normalizing sequences in right Noetherian rings. (82j:16006)
 Menal, Pere On rings of polynomials that are Bezout rings. (Spanish) (82i:16021)
 Raphael, R. Fully idempotent factorization rings. (82b:16005a)
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 Robson, J. C. See Bit-David, J., (82b:16022a)
 Smith, P. F. Injective modules and prime ideals. (82b:16018)
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 Stone, David R. Maximal left ideals and idealizers in matrix rings. (82d:16015)

16A68 Lie, Jordan and other nonassociative structures on associative rings

- Streb, Walter Lie structure in semiprime rings with involution. 82j:16059

secondary classifications:

- Bergen, Jeffrey (with Herstein, I. N.; Kerr, Jeanne Wald) Lie ideals and derivations of prime rings. (82k:16045)
 Fel'dman, G. L. Global dimension of rings of differential operators. (Russian) (82b:16023)
 Herstein, I. N. See Bergen, Jeffrey; et al., (82k:16045)
 Kerr, Jeanne Wald See Bergen, Jeffrey; et al., (82k:16045)
 Latyshev, V. N. Nonmatrix varieties of associative algebras. (Russian) (82f:16014)
 Piacentini Cattaneo, Giulia Maria Gemetic algebras of mutation and Jordan algebras. (Italian summary) (82c:92015)

16A70 Commutativity theorems

- Abu-Khuzam, Hazar (with Yaqub, Adil) Some conditions for commutativity of rings with constraints on nilpotent elements. 82b:16035
 (with Tominaga, Hisao; Yaqub, Adil) A commutativity theorem for rings with constraints involving an additive subsemigroup. II. 82a:16032
 (with Tominaga, Hisao; Yaqub, Adil) Commutativity theorems for s -unital rings satisfying polynomial identities. 82b:16036
 A commutativity theorem for semiprimitive rings. 82a:16024
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 Bell, Howard E. On commutativity of periodic rings and near-rings. 82b:16025
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 Hirano, Yasuyuki (with Hongan, Motoishi; Tominaga, Hisao) Commutativity theorems for certain rings. 82b:16037
 (with Tominaga, Hisao) A commutativity theorem for semiprime rings. 82f:16039
 Hongan, Motoishi See Hirano, Yasuyuki; et al., 82b:16037
 Klein, Abraham A. (with Nada, Itzhak; Bell, Howard E.) Some commutativity results for rings. 82b:16038
 Luh, Jiang See Chung, Lung Ock, 82a:16026 and 82a:16027
 Mogami, Isao Note on commutativity of rings. 82m:16034
 Moore, H. G. Generalized n -like rings and commutativity. 82d:16032
 Nada, Itzhak See Klein, Abraham A.; et al., 82b:16038
 Psomopoulos, Evagelos (with Tominaga, Hisao; Yaqub, Adil) Some commutativity

theorems for n -torsion free rings. 82j:16060

- Tominaga, Hisao See Abu-Khuzam, Hazar; et al., 82a:16032; 82b:16036;
 Hirano, Yasuyuki; et al., 82b:16037; 82b:16039 and Psomopoulos, Evagelos; et al., 82j:16060
 Yaqub, Adil See Abu-Khuzam, Hazar; et al., 82a:16032; 82b:16035; 82b:16036;
 82d:16031 and Psomopoulos, Evagelos; et al., 82j:16060
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secondary classifications:

- Bell, Howard E. Centres for near-rings: applications to commutativity theorems. (82a:16034)
 Dasić, V. See Perić, V., (82d:16035)
 Osterburg, James Central fixed rings. (82c:16030)
 Perić, V. (with Dasić, V.) D -Kommutativität der Fastringe mit Distributivitätsdefekt D . (English and Serbo-Croatian summaries) (82d:16035)
 Szeto, George On a commutative diagram of group ring homomorphisms. (82d:16009)

16A72 Automorphisms, derivations, other morphisms

- Alev, Jack Quelques propriétés de l'anneau R^G . 82a:16028
 Benkart, Georgia M. (with Osborn, J. Marshall) Derivations and automorphisms of nonassociative matrix algebras. 82b:16026
 Bergen, Jeffrey (with Herstein, I. N.; Kerr, Jeanne Wald) Lie ideals and derivations of prime rings. 82k:16045
 Goursaud, J.-M. (with Osterburg, James; Pascaud, J. L.; Valette, J.) Points fixes des anneaux réguliers auto-injectifs à gauche. 82k:16046
 Haile, Darrell E. On central simple algebras of given exponent. II. 82c:16029
 Harčenko, V. K. Groups and Lie algebras acting on noncommutative rings. (Russian) 82c:16032
 Constants of derivations of prime rings. (Russian) 82j:16032
 Herstein, I. N. See Bergen, Jeffrey; et al., 82k:16045
 Hirano, Yasuyuki (with Tominaga, Hisao) On rings whose nonconstant semigroup endomorphisms are ring endomorphisms. 82j:16061
 Kerr, Jeanne Wald See Bergen, Jeffrey; et al., 82k:16045
 Kishimoto, Kazuo On automorphisms of skew polynomial rings. 82c:16033
 Komatsu, Hiroaki On inner (σ, τ) -derivations of simple rings. 82j:16062
 Osborn, J. Marshall See Benkart, Georgia M., 82b:16026
 Osterburg, James Central fixed rings. 82c:16030
 See also Goursaud, J.-M.; et al., 82k:16046
 Pascaud, J. L. See Goursaud, J.-M.; et al., 82k:16046
 Tominaga, Hisao See Hirano, Yasuyuki, 82j:16061
 Valette, J. See Goursaud, J.-M.; et al., 82k:16046

secondary classifications:

- Azumaya, Gorō Fixed subalgebra of a commutative Frobenius algebra. (82b:16011)
 Burkov, V. D. Differentially prime rings. (Russian) (82f:16002)
 Ikehata, Shūichi On separable polynomials in skew polynomial rings. (82c:16004)
 Nakajima, Atsushi Coseparable coalgebras and coextensions of coderivations. (82g:16015)
 Poli, A. (with Ventou, M.) Codes auto-duals principaux et groupe d'automorphismes de l'algèbre $A = F_2[X_1, \dots, X_n]/(X_i^2 - 1, \dots, X_n^2 - 1)$. (English summary) (82i:94022)
 Ventou, M. See Poli, A., (82i:94022)

16A74 Galois theory

- Cohen, Miriam (with Montgomery, Susan) Trace functions for finite automorphism groups of rings. 82b:16037
 Handelman, David (with Renault, G.) Actions of finite groups on self-injective rings. 82c:16031
 Montgomery, Susan (with Small, Lance W.) Fixed rings of Noetherian rings. 82a:16033
 Prime ideals in fixed rings. 82c:16034
 See also Cohen, Miriam, 82b:16037
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 Renault, G. See Handelman, David, 82c:16031
 Small, Lance W. See Montgomery, Susan, 82a:16033
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 On a special type of Galois extensions. 82c:16036

secondary classifications:

- Azumaya, Gorō Fixed subalgebra of a commutative Frobenius algebra. (82b:16011)
 Fein, Burton (with Schacher, Murray) Brauer groups of rational function fields over global fields. (82b:12025)
 Harčenko, V. K. Groups and Lie algebras acting on noncommutative rings. (Russian) (82c:16032)
 Schacher, Murray See Fein, Burton, (82b:12025)
 Ulbrich, K.-H. Vollgraduierte Algebren. [Fully graded algebras] (82m:16002)

16A76 Near-rings [See also 12K05.]

- Bell, Howard E. Centres for near-rings: applications to commutativity theorems. 82a:16034
 Bhandari, M. C. (with Saxena, P. K.) A note on Levitzki radical of near-ring. 82c:16038
 Dasić, V. See Perić, V., 82d:16035
 Feigelstock, Shalom On a paper of G. Mason. 82b:16039
 Ferrero Cotti, Celestina On stems on whose square there is an involution. (Italian. English summary) 82a:16035
 (with Rinaldi, M. G.) Near-rings whose proper ideals are maximal. (Italian. English summary) 82b:16027

- John, David Identities and left cancellation in distributively generated near-rings. **82b:16028**
- Kaarli, K. Classification of irreducible modules over semiprimary near-rings. (Russian. Estonian and English summaries) **82b:16047**
- Kim, W. J. See Park, Young Soo, **82b:16040**
- Laxton, R. R. (with Lockhart, R.) The near-rings hosted by a class of groups. **82a:16036**
- Letizia, Angiola On a special algebra with two operations. **82b:16048**
- Lockhart, R. See Laxton, R. R., **82a:16036**
- Lyons, C. G. (with Meldrum, J. D. P.) N -series and tame near-rings. **82d:16033**
- Mahmood, S. J. (with Meldrum, J. D. P.; O'Carroll, L.) Inverse semigroups and near-rings. **82d:16033**
- Maxson, Carlton J. (with Smith, Kirby C.) Centralizer near-rings that are endomorphism rings. **82d:16034**
- (with Smith, Kirby C.) Centralizer near-rings determined by completely regular inverse semigroups. **82c:16037**
- Meldrum, J. D. P. See Lyons, C. G., **82d:16033** and Mahmood, S. J.; et al., **82e:16033**
- O'Carroll, L. See Mahmood, S. J.; et al., **82e:16033**
- Park, Young Soo (with Kim, W. J.) On structures of left bipotent near-rings. **82f:16040**
- Perić, V. (with Dasić, V.) D -Kommutativität der Fastringe mit Distributivitätsdefekt D . (English and Serbo-Croatian summaries) **82d:16035**
- Pilz, Günter Near-rings of compatible functions. **82f:16041**
- (with So, Yong Sian) Near-rings of polynomials over Ω -groups. **82e:16034**
- Rinaldi, M. G. See Ferrero Cotti, Celestina, **82b:16027**
- Saxena, P. K. See Bhandari, M. C., **82b:16038**
- Scott, S. D. Nilpotent subsets of near-rings with minimal condition. **82b:16049**
- Seth, V. See Tewari, K., **82e:16035**
- Smith, Kirby C. See Maxson, Carlton J., **82c:16037** and **82d:16034**
- So, Yong Sian See Pilz, Günter, **82e:16034**
- Ștefănescu, Mirela On semisimple infra-near rings. II. **82b:16029**
- Self-distributive infra-near rings. (Italian summary) **82m:16035**
- Multiplications infra-distributives sur un groupe. **82c:16038**
- Tewari, K. (with Seth, V.) Classical near-rings of left and right quotients. **82e:16035**
- Thomsen, Momme Johs Near-rings with right inverse property. **82a:16037**
- Zeamer, R. Warwick On the endomorphism near-ring of a free group. **82f:16042**
- secondary classifications:
- Bell, Howard E. On commutativity of periodic rings and near-rings. **(82b:16025)**
- Militz, Rainer Radicals and semisimple classes of Ω -groups. **(82e:17005)**
- Pettet, Martin R. Nilpotent partition-inducing automorphism groups. **(82b:20003)**

16A78 Semirings and other generalizations of rings

- Allen, Paul J. See Dale, Louis, **82c:16039**
- Dale, Louis A note on: "The structure of ideals in a Euclidean semiring" [Kyungpook Math. J. 17 (1977), no. 1, 21-29; MR 56 #3066] by Dale and D. L. Hanson. **82b:16040**
- (with Allen, Paul J.) An extension of the Hilbert basis theorem. **82c:16039**
- Feigelson, Shalom Radicals of the semiring of abelian groups. **82e:16036**
- (Hanson, Dorothy L.) See Dale, Louis, **82b:16040**
- Hutchins, Harry Division semirings with $1+1=1$. **82e:16037**
- Kaya, Arif (with Satyanarayana, M.) Semirings satisfying properties of distributive type. **82b:16030**
- Kyuno, Shoji On a Nobusawa's gamma ring $(\mathbb{R}_M \Gamma)$. **82c:16040**
- Lee, Sin Min On a variety of semirings whose additive semigroups are left groups. **82g:16033**
- Noronha-Galvão, M. L. Ideals in the semiring N . **82j:16063**
- Satyanarayana, M. See Kaya, Arif, **82b:16030**

secondary classifications:

- Satyanarayana, M. On the additive semigroup structure of semirings. **(82i:20084)**
- Wechler, Wolfgang On algebraic power series. **(82f:68085)**
- Zelevnikov, John The natural partial order on semirings. **(82e:06015)**

16A80 Topological rings and modules [See also 13Jxx.]

- Ahsan, J. (with Ismail, Mohammad) On semisimple linearly compact rings. **82e:16038**
- Dihn Van Huynh Über linear kompakte Ringe. **82d:16036**
- Dikranjan, Dikran Minimal ring topologies and Krull dimension. **82c:16040**
- (with Wiślaw, Witold) Rings with only ideal topologies. **82b:16031**
- Hirschfeld, Rudolf A. A Mazur-Gel'fand theorem for generalized division algebras. (Russian summary) **82g:16034**
- Ismail, Mohammad See Ahsan, J., **82e:16038**
- Kalistru, R. K. Completeness of a free topological module generated by a zero-dimensional space. (Russian) **82g:16035**
- Marubayashi, Hidetoshi Linearly compact modules over HNP rings. (See **82f:20006**)
- Ryan, Marilyn Locally linearly compact semisimple rings. **82g:16036**
- Večtomov, E. M. The module of all functions over a ring of continuous functions. (Russian) **82b:16041**
- Wiślaw, Witold See Dikranjan, Dikran, **82b:16031**

secondary classifications:

- Charles, Bernard Opérateurs linéaires sur un espace de Banach et modules sur un anneau principal. **(82a:47018)**
- Dales, H. G. Norming nil algebras. **(82j:46069)**
- Datavišvili, T. I. On the global homological dimensions of trivial linear topological extensions of linear topological rings. (Russian. Georgian and English summaries) **(82j:16042b)**
- Năstăsescu, Constantin Modules injectifs de type fini par rapport à une topologie additive. **(82e:16002)**

- Putinar, Mihai Functional calculus with sections of an analytic space. **(82i:32033)**
- Verschoren, A. Finite-dimensional π -regular algebras. **(82i:46074)**

16A86 Ordered rings [See also 06F25.]

secondary classifications:

- Mahdavi-Hezavehi, M. Totally ordered rings and fields. **(82c:06017)**
- Steinberg, Stuart A. Lattice-ordered modules of quotients. **(82c:06019)**
- Wilson, Robert Ross Anti-f-rings. **(82c:06020)**

16A89 Equivalence of module categories

- Marmaridis, Nikolaos Reflection functors. **82b:16042**
- Mulvey, Christopher J. Representations of rings and modules. **82e:16039**

secondary classifications:

- Kas, A. I. Morita contexts and torsions of modules. (Russian) **(82b:16027)**
- Ohtake, Koichiro A generalization of Kato's theorem on Morita duality. **(82d:18010)**

16A90 Categorical methods and categorical ring theory

- Damiano, Robert F. (with Papp, Zoltán) On consequences of stability. **82b:16032**
- Papp, Zoltán See Damiano, Robert F., **82b:16032**
- Small, Charles Some functors which lie between the additive and multiplicative groups of a ring. **82d:16037a**
- Corrections to: "Some functors which lie between the additive and multiplicative groups of a ring". **82d:16037b**

secondary classifications:

- Datavišvili, T. I. The homological dimension of the extensions of abelian categories and rings. (Russian. Georgian and English summaries) **(82b:18009)**
- Diers, Yves Some spectra relative to functors. **(82j:18004)**
- Gruenberg, K. W. (with Roggenkamp, K. W.) Extension categories of groups and modules. II. Stem extensions. **(82i:16031)**
- Nathanson, Melvyn B. Classification problems in K -categories. **(82b:16033)**
- Radnev, Petko Projective objects in a category of p -rings. (Russian) **(82j:16009)**
- Roggenkamp, K. W. See Gruenberg, K. W., **(82i:16031)**

16A99 Miscellaneous topics

- Domingues, Hygino Hugueros (with Scuderi, Santo) Some characterizations of epimorphisms of rings. (Portuguese. English summary) **82i:16041**
- Grover, John Epimorphisms of units groups. (Arabic summary) **82b:16043**
- Lenagan, T. H. On a theorem of Herstein and Small. **82b:16044**
- McDonald, B. R. Projectivities over rings with many units. **82g:16037**
- McQuillan, Donald L. On subfields in extension rings. **82b:16045**
- Nijā, Ana Sur les ultraproducts des modules. **82d:16038**
- Scuderi, Santo See Domingues, Hygino Hugueros, **82i:16041**
- Thierrin, G. Rings with right disjunctive elements. **82e:16041**

secondary classifications:

- Berline, Chantal Rings which admit elimination of quantifiers. **(82d:03046)**
- Boffa, M. (with Macintyre, Angus; Point, Françoise) The quantifier elimination problem for rings without nilpotent elements and for semisimple rings. **(82d:03054)**
- da Costa Reis, M. Raquel P. Partial residuals in groupoid lattices. III. **(82m:20034)**
- Hoek, J. On Campbell-Baker-Hausdorff formulae and time-ordered exponentials. **(82e:16040)**
- Macintyre, Angus See Boffa, M.; et al., **(82d:03054)**
- Naudé, G. (with Nolte, C.) Linear systems: introductory remarks and a duality theory for systems over rings. (See **82i:16002**)
- Nolte, C. See Naudé, G., (See **82i:16002**)
- Point, Françoise Élimination des quantificateurs dans les L -anneaux π -réguliers et application aux anneaux biréguliers. **(82b:03028)**
- See also Boffa, M.; et al., **(82d:03054)**
- Roitman, M. (with Sternfeld, Y.) When is a linear functional multiplicative? **(82j:46061)**
- Sawada, Hideki Some infinite-dimensional indecomposable modules of Chevalley groups. **(82j:20082)**
- Sternfeld, Y. See Roitman, M., **(82j:46061)**
- Stojanov, Ivan S. (with Tonov, Ivan K.) The union and product of a variety of associative algebras. (Russian) **(82m:08008)**
- Teplý, Mark L. On semigroup algebras and semisimple semilattice sums of rings. **(82j:20126)**
- Tonov, Ivan K. See Stojanov, Ivan S., **(82m:08008)**

17-XX NONASSOCIATIVE RINGS AND ALGEBRAS

17-01 Elementary exposition, textbooks

- Piacentini Cattaneo, Giulia Maria A connection between algebra and genetics: some ideas for introducing the concept of a nonassociative algebraic structure in high schools. (Italian. English summary) **82b:17001**

secondary classifications:

- Hochschild, Gerhard P. ★Basic theory of algebraic groups and Lie algebras. **(82i:20002)**

17-02 Advanced exposition (research surveys, monographs, etc.)

- Bahturin, Ju. A.** (with Slin'ko, A. M.; Šestakov, I. P.) Nonassociative rings. (Russian) **82h:17002**
- Balzer, Cindy** See Tomber, Marvin L.; et al., **82i:17001**
- Coryell, Hellen** See Tomber, Marvin L.; et al., **82i:17001**
- Norris, Diane M.** See Tomber, Marvin L.; et al., **82i:17001**; **82i:17002** and **82j:17001**
- Ordway, Judy** See Tomber, Marvin L.; et al., **82i:17001**
- Reynolds, Mary** See Tomber, Marvin L.; et al., **82i:17001**
- Šestakov, I. P.** See Bahturin, Ju. A.; et al., **82i:17002**
- Slin'ko, A. M.** See Bahturin, Ju. A.; et al., **82i:17002**
- Smith, C. L.** See Tomber, Marvin L.; et al., **82i:17002** and **82j:17001**
- Terry, Tamara** See Tomber, Marvin L.; et al., **82i:17001**
- Tomber, Marvin L.** (with Norris, Diane M.; Reynolds, Mary; Balzer, Cindy; Trebilcote, Kathy; Terry, Tamara; Coryell, Hellen; Ordway, Judy) A nonassociative algebra bibliography. **82i:17001**
- (with Smith, C. L.; Norris, Diane M.; Welk, R.) Addenda to: "A nonassociative algebra bibliography" [Hadronec J. 3 (1979/80), no. 1, 507-725; MR **82i:17001**]. **82i:17002**
- (with Smith, C. L.; Norris, Diane M.) A subject index of works relating to nonassociative algebras. **82j:17001**
- Trebilcote, Kathy** See Tomber, Marvin L.; et al., **82i:17001**
- Welk, R.** See Tomber, Marvin L.; et al., **82i:17002**
- Bibliography:**
- Nonassociative algebra See Tomber, Marvin L.; et al., **82i:17001** and **82i:17002**
- Index:**
- Nonassociative algebra See Tomber, Marvin L.; et al., **82j:17001**

secondary classifications:

- Löhmus, J.** See Sorgsepp, L., (**82g:17019**)
- Sorgsepp, L.** (with Löhmus, J.) About nonassociativity in physics and Cayley-Graves' octonions. (**82g:17019**)
- Wene, G. P.** Towards a structure theory for Lie-admissible algebras. (**82k:17001**)
- Wilson, Robert Lee** The classification problem for simple Lie algebras of characteristic p . (**82i:17021**)

17-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Löhmus, J.** See Sorgsepp, L., (**82g:17019**)
- Sorgsepp, L.** (with Löhmus, J.) About nonassociativity in physics and Cayley-Graves' octonions. (**82g:17019**)
- Tomber, Marvin L.** A short history of nonassociative algebras. (**82e:01069**)

17-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Hentzel, Irvin Roy** (with Hogben, Leslie) Exhaustive checking of sparse algebras. (**82m:17010**)
- Hogben, Leslie** See Hentzel, Irvin Roy, (**82m:17010**)

17-06 Proceedings, conferences, etc.

- Algebraic groups** ★ Lie algebras, algebraic groups and related topics. (Japanese) **82a:17001**
- Lie algebras, algebraic groups and related topics** ★ Lie algebras, algebraic groups and related topics. (Japanese) **82a:17001**
- Symposium:**
- Lie Algebras, Algebraic Groups and Related Topics** ★ Lie algebras, algebraic groups and related topics. (Japanese) **82a:17001**

secondary classifications:

- (Amayo, Ralph K.) See Algebra, (**82d:20004**)
- Algebra** ★ Algebra, Carbondale 1980. (**82d:20004**)
- Boston, Mass.** ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part A. (**82f:81002a**)
- ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B. (**82f:81002b**)
- ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. (**82f:81002c**)
- Carbondale, Ill.** ★ Algebra, Carbondale 1980. (**82d:20004**)
- Conference:**
- Southern Illinois, Algebra** ★ Algebra, Carbondale 1980. (**82d:20004**)
- Experimental physics** ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. (**82f:81002c**)
- Group theory** ★ Algebra, Carbondale 1980. (**82d:20004**)
- Lie-admissible formulations** ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part A. (**82f:81002a**)
- ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B. (**82f:81002b**)
- ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. (**82f:81002c**)
- Lie algebras** ★ Algebra, Carbondale 1980. (**82d:20004**)
- Proceedings:**
- Workshop on Lie-Admissible Formulations** ★ Proceedings of the Third Workshop on

Proceedings: (continued)

- Lie-Admissible Formulations. Part A.** (**82f:81002a**)
- ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B. (**82f:81002b**)
- ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. (**82f:81002c**)
- Theoretical physics** ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B. (**82f:81002b**)
- Workshop:**
- Lie-Admissible Formulations** ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part A. (**82f:81002a**)
- ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part B. (**82f:81002b**)
- ★ Proceedings of the Third Workshop on Lie-Admissible Formulations. Part C. (**82f:81002c**)

17Axx General nonassociative rings

17A01 General theory

- Wene, G. P.** Towards a structure theory for Lie-admissible algebras. **82k:17001**

secondary classifications:

- Burgin, M. S.** Representations of linear Ω -algebras in the form of products. (Russian) (**82d:08001**)
- Lakser, Harry** The homotopy of simplicial algebras. (**82e:55035**)

17A05 Power-associative

17A10 Commutative power-associative

secondary classifications:

- Piacentini Cattaneo, Giulia Maria** Gametic algebras of mutation and Jordan algebras. (Italian summary) (**82c:92015**)

17A15 Noncommutative Jordan algebras

secondary classifications:

- Mignani, Roberto** On Jordan- and Lie-admissibility of generalized superalgebras. (**82a:17002**)
- Okubo, Susumu** Some classes of flexible Lie-Jordan-admissible algebras. (**82h:17004**)

17A20 Flexible algebras

- el-Mallah, Mohamed Lamei** (with Micali, Artibano) Sur les dimensions des algèbres absolument valuées. (English summary) **82e:17001**
- Micali, Artibano** See el-Mallah, Mohamed Lamei, **82e:17001**
- Oehmke, Robert H.** On finite division rings. **82d:17001**
- Okubo, Susumu** A generalization of Hurwitz theorem and flexible Lie-admissible algebras. **82j:17002**
- Tomber, Marvin L.** Jacobson-Witt algebras and Lie-admissible algebras. **82k:17002**

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- Myung, Hyo Chul** Current developments of Lie-admissible algebras. (**82d:17002**)
- See also Okubo, Susumu, (**82g:17004**)
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17A25 Nodal algebras

secondary classifications:

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17A30 Algebras satisfying other identities

- Filippov, V. T.** Zero divisors in binary Lie algebras. (Russian) **82h:17003**
- Florja, R. S.** See Rjabuhin, Ju. M., **82g:17001**
- Griškov, A. N.** Structure and representations of binary-Lie algebras. (Russian) **82i:17001**
- Hentzel, Irvin Roy** (with Smith, Harry F.) Derivation alternator rings with idempotent. **82e:17002**
- Myung, Hyo Chul** Current developments of Lie-admissible algebras. **82d:17002**
- Okubo, Susumu** Some classes of flexible Lie-Jordan-admissible algebras. **82h:17004**
- Pělinec, S. V.** On the variety generated by a free algebra of type $(-1, 1)$ rank 2. (Russian) **82j:17003**
- Rjabuhin, Ju. M.** (with Florja, R. S.) Simple relatively free rings and minimal varieties of rings. (Russian) **82g:17001**
- Smith, Harry F.** See Hentzel, Irvin Roy, **82e:17002**

secondary classifications:

- Filippov, V. T.** Nilpotent ideals in Mal'cev algebras. (Russian) (**82h:17024**)
- Gainov, A. T.** Orthogonal sums of nondegenerate algebras with identity. (Russian) (**82h:17003**)
- el-Mallah, Mohamed Lamei** (with Micali, Artibano) Sur les dimensions des algèbres absolument valuées. (English summary) (**82e:17001**)
- Micali, Artibano** See el-Mallah, Mohamed Lamei, (**82e:17001**)
- Okubo, Susumu** Nonassociative quantum mechanics and strong correspondence principle. (**82j:81010**)

17A35 Division algebras

secondary classifications:

- Hefendehl-Hebeker, Lisa Vierdimensionale quadratische Divisionsalgebren über Hilbert-Körpern. (82k:17004)
 Okubo, Susumu Dimension and classification of general composition algebras. (82k:17003)
 Prasolov, V. V. Linear spaces in the general linear group. (Russian) (82i:15014)

17A36 Automorphisms, derivatives, other operators

17A40 Ternary compositions

- Hein, Wolfgang On the structure of reduced $\frac{1}{2}$ -ternary algebras of degree > 2 . 82g:17002
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- Länger, Helmut Commutative quasitrivial superassociative systems. (82a:20082)
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17A42 Other n -ary compositions

- Jiménez B., Luis Rafael The prime radical in triple systems. (Spanish) 82i:17003
 Micale, Biagio The nucleus and the center of a distributive Ω -group. (Italian) 82e:17004
 Okubo, Susumu Dimension and classification of general composition algebras. 82k:17003

17A45 Quadratic algebras (not quadratic Jordan algebras)

- Hefendehl-Hebeker, Lisa Vierdimensionale quadratische Divisionsalgebren über Hilbert-Körpern. 82k:17004
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 Osborn, J. Marshall See Okubo, Susumu, 82h:17005

17A50 Free algebras

17A60 Structure theory in general nonassociative rings

17A65 Radical theory in general nonassociative rings

- Gardner, B. J. Multiple radical theories. 82g:17003
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 Kuczyński, Andrzej Józef Radicals and derivations of Lie algebras. (Russian summary) 82h:17001
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- Backhouse, Nigel Some examples of nonpolynomial invariants of Lie superalgebras. (See 82h:81004)
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- Berezin, F. A. (with Tolstol, V. N.) The group with Grassmann structure $UOSP(1,2)$. (82c:22023)
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 Gu, Ming Gao See Li, Xin Zhou; et al., (82f:81087)
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17A75 Composition algebras

17A99 None of the above, but in this section

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- Borbo, Walter (with MacPherson, Robert) Représentations des groupes de Weyl et homologie d'intersection pour les variétés nilpotentes. (English summary) (82i:14002)
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17B10 Representations, algebraic theory (weights)

- Al-Qubanchi, A. H. A. See King, Ronald Curtis, 82i:17006
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- Schgal, Surinder K. Projectors of Lie algebras. (82c:17006)

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- Teneva, S. G. Directed orders in Lie algebras. (Bulgarian. Russian and English summaries) 82h:17012
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- Bacry, H. The Poincaré group, the Dirac monopole and photon localisation. (82d:81067)
- Givental, A. B. Convolution of invariants of groups generated by reflections that are associated to simple singularities of functions. (Russian) (82f:58019)
- Guralnick, Robert M. Triangularization of sets of matrices. (82d:15009)
- Kuczyński, Andrzej Józef Radicals and derivations of Lie algebras. (Russian summary) (82h:17001)
- Uhorvskii, M. R. Commutativity of finite-dimensional subalgebras of Lie algebras of vector fields that are solenoidal in a two-dimensional domain and tangent to its boundary. (Russian) (82h:53090)

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- Neher, Erhard Involutive gradings of Jordan structures. 82h:17025

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- Neher, Erhard Klassifikation der einfachen reellen Ausnahme-Jordan-Tripelsysteme. 82g:17017

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- Béllissard, J. (with Iochum, B.) Homogeneous self-dual cones and Jordan algebras. (82e:17017)
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- Youngson, M. A. Nonunital Banach Jordan algebras and C^* -triple systems. (82j:46071)

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- Ajupov, Š. A. On the theory of partially ordered Jordan algebras. (Russian) 82e:17019a
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- Bhandari, M. C. (with Radhakrishna, A.) On ordered Jordan algebras. 82i:17027
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- Faulkner, J. R. (with Ferrar, J. C.) Simple anti-Jordan pairs. 82e:17020
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- McCrimmon, Kevin (with Meyberg, Kurt) Coordinatization of Jordan triple systems. 82k:17012
- Meyberg, Kurt See McCrimmon, Kevin, 82k:17012
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- Makarevič, B. O. Jordan algebras and orbits in symmetric R -spaces. (Russian) (82e:53035)
- Okubo, Susumu Nonassociative quantum mechanics and strong correspondence principle. (82j:81010)

17Dxx Other nonassociative rings and algebras

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- Hentzel, Irvin Roy (with Kleinfeld, E.; Smith, Harry F.) Alternative rings with idempotent. 82j:17022
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- Hogben, Leslie See Hentzel, Irvin Roy, 82m:17010
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- characteristic 2 that does not have a finite basis of identities. (Russian) **82e:17021**
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Satyanarayana Murthy, P. V. von Neumann regularity in alternative algebras. **82j:17024**
Sestakov, I. P. Irreducible representations of alternative algebras. (Russian) **82j:17025**
Smith, Harry F. See **Hentzel, Irvin Roy**; et al., **82j:17022**
Sorgsepp, L. (with Löhmus, J.) About nonassociativity in physics and Cayley-Graves' octonions. **82g:17019**
Vernikov, B. M. (with Volkov, M. V.) Almost chain varieties of alternative rings. (Russian) **82a:17012**
Volkov, M. V. See **Vernikov, B. M.**, **82a:17012**
Wene, G. P. Alternative rings whose symmetric elements are nilpotent or a right multiple is a symmetric idempotent. **82g:17020**
Widiger, A. Decomposition of Artinian alternative rings. (Russian) **82b:17023**
Zeljabin, V. N. A theorem on the splitting of the radical for alternative algebras over a Hensel ring. (Russian) **82e:17015**

secondary classifications:

- Bojadžiev, H. N.** (with Youngson, M. A.) Alternators on Banach Jordan algebras. (82m:17009)
Hentzel, Irvin Roy (with Smith, Harry F.) Derivation alternator rings with idempotent. (82e:17002)
Medvedev, Ju. A. Cross varieties of algebras. (Russian) **(82k:08007)**
Petersson, Holger P. The isotopy problem for Jordan matrix algebras. **(82e:17018)**
Rjabuhin, Ju. M. (with Wiegandt, R.) On special radicals, supernilpotent radicals and weakly homomorphically closed classes. **(82k:16009)**
Smith, Harry F. See **Hentzel, Irvin Roy**, **(82e:17002)**
Wiegandt, R. See **Rjabuhin, Ju. M.**, **(82k:16009)**
Youngson, M. A. See **Bojadžiev, H. N.**, **(82m:17009)**

17D10 Mal'cev rings

- Filippov, V. T.** Nilpotent ideals in Mal'cev algebras. (Russian) **82b:17024**
 On the theory of finitely generated Mal'cev algebras. (Russian) **82e:17022**
Griškov, A. N. Decomposable Mal'cev algebras. (Russian) **82e:17023**

secondary classifications:

- Filippov, V. T.** Zero divisors in binary Lie algebras. (Russian) **(82b:17003)**
Löhmus, J. See **Sorgsepp, L.**, **(82m:30050)**
Medvedev, Ju. A. Cross varieties of algebras. (Russian) **(82k:08007)**
Sorgsepp, L. (with Löhmus, J.) Binary and ternary sedenions. **(82m:30050)**

17D15 Right alternative rings

17D20 (γ, δ) -rings

17D25 Lie admissible algebras

- Kang, Byung Lyun** See **Ko, Young So**; et al., **82j:17026**
Ko, Young So (with Kang, Byung Lyun; Myung, Hyo Chul) On Lie-admissible of vector matrix algebras. **82j:17026**
Myung, Hyo Chul See **Ko, Young So**; et al., **82j:17026**

secondary classifications:

- Benkart, Georgia M.** (with Osborn, J. Marshall; Britten, Daniel J.) Flexible Lie-admissible algebras with the solvable radical of A^- abelian and Lie algebras with nondegenerate forms. **(82j:17006)**
Britten, Daniel J. See **Benkart, Georgia M.**; et al., **(82j:17006)**
Fronteau, J. Brief introduction to Lie-admissible formulations in statistical mechanics. **(82k:82004)**
Okubo, Susumu Nonassociative quantum mechanics and strong correspondence principle. **(82j:81010)**
Osborn, J. Marshall See **Benkart, Georgia M.**; et al., **(82j:17006)**
Tomber, Marvin L. Jacobson-Witt algebras and Lie-admissible algebras. **(82k:17002)**

17D92 Genetic algebras

- Holgate, Philip** Les grades de certaines algèbres génétiques. (English summary) **82j:17027**

secondary classifications:

- Abraham, Victor M.** The genetic algebra of polyploids. **(82k:92037)**
Holgate, Philip Population algebras. **(82g:92030)**
Piacentini Cattaneo, Giulia Maria A connection between algebra and genetics: some ideas for introducing the concept of a nonassociative algebraic structure in high schools. (Italian. English summary) **(82b:17001)**

17D99 None of the above, but in this section

- Allison, B. N.** (with Hein, Wolfgang) Isotopes of some nonassociative algebras with involution. **82k:17013**
Hein, Wolfgang See **Allison, B. N.**, **82k:17013**

secondary classifications:

- Abraham, Victor M.** Linearizing quadratic transformations in genetic algebras. **(82c:92013a)**

- The induced linear transformation in a genetic algebra. **(82c:92013b)**
Agrachev, A. A. (with Gamkrelidze, R. V.) Chronological algebras and nonstationary vector fields. (Russian) **(82b:58075)**
Artamonov, V. A. Minimal varieties of generalized semigroups, groups and rings. (Russian) **(82d:20056)**
Gamkrelidze, R. V. See **Agrachev, A. A.**, **(82b:58075)**
Griess, Robert L., Jr. A construction of F_4 as automorphisms of a 196,883-dimensional algebra. **(82d:20022)**
Holgate, Philip Population algebras. **(82g:92030)**
Itoh, Yoshiaki Nonassociative algebra and Lotka-Volterra equation with ternary interaction. **(82b:92034)**
Okubo, Susumu (with Osborn, J. Marshall) Algebras with nondegenerate associative symmetric bilinear forms permitting composition. **(82b:17005)**
Osborn, J. Marshall See **Okubo, Susumu**, **(82b:17005)**
Piacentini Cattaneo, Giulia Maria Genetic algebras of mutation and Jordan algebras. (Italian summary) **(82c:92015)**
Wörz-Busekros, Angelika ★Algebras in genetics. **(82e:92033)**

18-XX CATEGORY THEORY, HOMOLOGICAL ALGEBRA

18-01 Elementary exposition, textbooks

- Krishnan, Viakalathur Sankrithi** ★An introduction to category theory. **82f:18001**
Northcott, D. G. ★A first course of homological algebra. **82k:18001**

18-02 Advanced exposition (research surveys, monographs, etc.)

- Lopez Lopez, M. P.** ★Objetos de Galois sobre un algebra de Hopf finita. (Spanish) [Galois objects over a finite Hopf algebra] **82b:18001**
Radu, Alexandru Gh. ★Teoria toposurilor. Vol. I. (Romanian) [Theory of topoi. Vol. I] **82j:18001**

secondary classifications:

- Bryniski, Maciej** (with Jurkiewicz, Jerzy) ★Zbiór zadań z algebry. (Polish) [A collection of problems in algebra] **(82i:00009)**
Jurkiewicz, Jerzy See **Bryniski, Maciej**, **(82i:00009)**

18-03 Historical (must also be assigned at least one classification number from Section 01)

18-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Burstein, R. M.** Electronic category theory. **(82a:68011)**

18-06 Proceedings, conferences, etc.

- (Ehresmann, Andrée Charles)** See **Colloquium: Categories**, **82b:18001**
(Ehresmann, Charles) See **Colloquium: Categories**, **82b:18001**
(Friedlander, Eric M.) See **Algebraic K-theory**, **82e:18001**
(Stein, Michael R.) See **Algebraic K-theory**, **82e:18001**
Algebraic K-theory ★Algebraic K-theory, Evanston 1980. **82e:18001**
Amiens ★3e Colloque sur les Catégories. Partie I. [Third Colloquium on Categories. Part I] **82b:18001a**
 ★3e Colloque sur les Catégories. Partie II. (French) [Third Colloquium on Categories. Part II] **82b:18001b**
Categories ★3e Colloque sur les Catégories. Partie I. [Third Colloquium on Categories. Part I] **82b:18001a**
 ★3e Colloque sur les Catégories. Partie II. (French) [Third Colloquium on Categories. Part II] **82b:18001b**
Colloquium:
Categories ★3e Colloque sur les Catégories. Partie I. [Third Colloquium on Categories. Part I] **82b:18001a**
 ★3e Colloque sur les Catégories. Partie II. (French) [Third Colloquium on Categories. Part II] **82b:18001b**
Conference:
Algebraic K-theory ★Algebraic K-theory, Evanston 1980. **82e:18001**
Evanston, Ill. ★Algebraic K-theory, Evanston 1980. **82e:18001**

18Axx General theory of categories and functors

18A05 Definitions, generalizations

- Arnoudov, Ja. N.** See **Topenzarov, Vladimir V.**, **82c:18002**
Diers, Yves Sur les familles monomorphiques régulières de morphismes. **82e:18001**
Topenzarov, Vladimir V. (with Arnoudov, Ja. N.) Quelques liens entre les $\langle n \rangle$ -catégories et les (n) -catégories. **82c:18002**

18A10 Graphs, diagram schemes, precategories, neocategories [See also 20Lxx.]

18A15 Foundations, relations to logic and deductive systems [See also 03-XX.]

- Meloni, Gian Carlo** (with Radaelli, Giorgio) A natural deduction system for residuated categories. (Italian. English summary) **82b:18001**

Radaelli, Giorgio See Meloni, Gian Carlo, 82h:18001

secondary classifications:

Reyes, Gonzalo E. Logic and category theory. (See 82f:03002)

Rosebrugh, Robert On defining objects by recursion in a topos. (82e:18006)

18A20 Epimorphisms, monomorphisms, special classes of morphisms, null morphisms, factorization (bicategories)

Kelly, G. M. (with Koubek, Václav) The large limits that all good categories admit. 82j:18002

Koubek, Václav See Kelly, G. M., 82j:18002

Pumplin, Dieter Initial morphisms and monomorphisms. 82d:18001

secondary classifications:

Diers, Yves Sur les familles monomorphiques régulières de morphismes. (82i:18001)

Osowski, Bogdan J. Subobjects, normal subobjects and duality in categories. (Russian summary) (82e:18002)

Wolff, Harvey The orthogonal subcategory problem for pointed endofunctors. (82d:18003)

18A22 Special properties of functors (faithful, full, etc.)

secondary classifications:

Adams, M. E. (with Sichler, J.) Subfunctors of full embeddings of algebraic categories. (82k:08009)

Akmalov, N. A. Topological groups of class $S(\nabla, bE)$ and their homomorphisms. (Russian) (82e:22009)

Sichler, J. See Adams, M. E., (82k:08009)

18A23 Natural morphisms, dinatural morphisms

Baclawski, Kenneth The Möbius algebra as a Grothendieck ring. 82k:18002

18A25 Functor categories, comma categories

Michelotti, Margherita See Pellegrino, Consolato, 82m:18001

Pellegrino, Consolato Construction of the subobject classifier for a class of comma categories. (Italian. English summary) 82j:18003
(with Michelotti, Margherita) A theorem on the creation of limits for a generalization of the comma categories. (Italian. English summary) 82m:18001

secondary classifications:

Andréka, Hajnal (with Németi, István) Löf lemma holds in every category. (82i:03049)

Németi, István See Andréka, Hajnal, (82i:03049)

18A30 Limits and colimits (products, sums, directed limits, pushouts, fiber products, equalizers, kernels, ends and coends, etc.)

secondary classifications:

Michelotti, Margherita See Pellegrino, Consolato, (82m:18001)

Pellegrino, Consolato (with Michelotti, Margherita) A theorem on the creation of limits for a generalization of the comma categories. (Italian. English summary) (82m:18001)

Rossi, Fabio Quasi-ends and a relative Yoneda lemma in the theory of relative bicategories. (Italian. English summary) (82f:18008)

Salles, Danielle Dualisation de la platitude. Systèmes projectifs de modules plats. Systèmes projectifs de modules injectifs. (82b:16025)

Vasilache, Sergiu Inductive (direct) limits in the categories of heterogeneous algebras and of abstract automata. (82c:08010a)

Direct limits in the categories of nonfinitary heterogeneous algebras. (82c:08010b)

18A32 Factorization of morphisms (via images, coimages, dominions, codominions), substructures, quotient structures, congruences, amalgams

Düman, D. The factorization of morphisms in a general category and in R -mod. III. Properties defined in terms of triangles and squares. (See 82i:16002)

Hauptfleisch, G. J. The factorization of morphisms in a general category and in R -mod. I. Projective and flat objects. (See 82i:16002)

Korostenski, M. The factorization of morphisms in a general category and in R -mod. II. Factorization triangles. (See 82i:16002)

Osowski, Bogdan J. Subobjects, normal subobjects and duality in categories. (Russian summary) 82e:18002

Pretorius, L. M. The factorization of morphisms in a general category and in R -mod. IV. The property \mathcal{P} and projective morphisms. (See 82i:16002)

secondary classifications:

Calenko, M. Š. See Talybov, M. A., (82d:18007)

Talybov, M. A. (with Calenko, M. Š.) Classification of ordered categories with involution, generated by functional morphisms. (Russian) (82d:18007)

18A35 Categories admitting limits (complete categories), functors commuting with limits, continuous functors, completions

secondary classifications:

Diers, Yves Quelques constructions de catégories localement multiprésentables. (82f:18006)

Frič, Roman (with Kent, Darrell C.) A completion functor for Cauchy groups. (82c:54001)

Kelly, G. M. (with Koubek, Václav) The large limits that all good categories admit. (82j:18002)

Kent, Darrell C. See Frič, Roman, (82c:54001)

Koubek, Václav See Kelly, G. M., (82j:18002)

Kumbhojkar, H. V. On the structure of initial objects of fibre categories. (82i:18009)

18A40 Adjoint functors (representable functors, universal constructions, reflective subcategories, reflections, etc.), constructions of adjoints (Kan extensions, etc.)

Diers, Yves Some spectra relative to functors. 82j:18004

Gramellini, Maria Letizia (with Tozzi, Anna) Final topological groups and coreflections. (Italian summary) 82i:18002

Hoffmann, Rudolf-E. Sequences of adjoints for Ens -valued functors. 82d:18002

Martinez-Calvo, Maria Cristina Exponentially well-behaved categories: a theorem on adjoint functors. (Spanish. English summary) 82j:18005

Pedicchio, M. Cristina Relations between K -morphisms and lax algebras. (Italian. English summary) 82h:18002

Siegel, Jerrold Čech extensions and localization of homotopy functors. 82b:18002

Tholen, Walter MacNeille completion of concrete categories with local properties. 82b:18003

Tozzi, Anna See Gramellini, Maria Letizia, 82i:18002

Wolff, Harvey The orthogonal subcategory problem for pointed endofunctors. 82d:18003

secondary classifications:

Banaschewski, B. (with Mulvey, Christopher J.) Stone-Čech compactification of locales. I. (82b:06010)

Bargenda, Hubertus (with Richter, Günther) Varietal hulls of functors. (82h:18004)

Bingener, Jürgen Darstellbarkeitskriterien für analytische Funktoren. (82i:32047)

Kelly, G. M. A unified treatment of transfinite constructions for free algebras, free monoids, colimits, associated sheaves, and so on. (82h:18003)

Mulvey, Christopher J. See Banaschewski, B., (82b:06010)

Richter, Günther See Bargenda, Hubertus, (82h:18004)

18A99 None of the above, but in this section

Guitart, René Relations et carrés exacts. 82i:18003

Herrlich, Horst (with Strecker, George E.) Semi-universal maps and universal initial completions. 82b:18004

Initial and final completions. 82c:18003

Roiter, A. V. BOCs with involution. (Russian) 82e:18003

Strecker, George E. See Herrlich, Horst, 82b:18004

Thomason, Robert W. Cat as a closed model category. 82h:18005

Van den Bril, Luc Carrés exacts de Hilton dans des contextes non abéliens. 82i:18004

secondary classifications:

Bognár, M. i -categories and homology. (82d:57005)

Calder, Allan (with Hastings, Harold M.) Realizing strong shape equivalences. (82g:55010)

Hastings, Harold M. See Calder, Allan, (82g:55010)

Nanda, Sribatsa A note on the universe of a category of fractions. (82g:55011)

Pumplin, Dieter Initial morphisms and monomorphisms. (82d:18001)

18Bxx Special categories

18B05 Category of sets, characterizations [See also 03-XX.]

Földes, Stéphane (with Mendelsohn, E.) Concrete categories and monoids of relational structures. 82j:18006

Mendelsohn, E. See Földes, Stéphane, 82j:18006

secondary classifications:

Barja Pérez, J. M. (with López López, Miguel A.) The triple $\text{Hom}(M, -)$. (Spanish) (82b:18010)

Hoffmann, Rudolf-E. Sequences of adjoints for Ens -valued functors. (82d:18002)

López López, Miguel A. See Barja Pérez, J. M., (82b:18010)

18B10 Category of relations, additive relations

Calenko, M. Š. Classification of categories of relations and types of regularity of categories. (Russian) 82i:18005

Content, Mireille (with Lemay, François; Leroux, Pierre) Catégories de Möbius et fonctorialités: un cadre général pour l'inversion de Möbius. (English summary) 82f:18002

Lemay, François See Content, Mireille; et al., 82f:18002

Leroux, Pierre See Content, Mireille; et al., 82f:18002

secondary classifications:

Succi Cruciani, Rosanna Sheaves over a regular category. (Italian. French summary) (82h:18007)

18B15 Imbedding theorems, universal categories [See also 18E20.]

Kolár, János The category of unary algebras containing a given subalgebra. II. **82c:18004**

secondary classifications:

Herrlich, Horst (with Strecker, George E.) Semi-universal maps and universal initial completions. **(82c:18004)**

Initial and final completions. **(82c:18003)**

Rosický, Jiří Equational categories. **(82c:18011)**

Strecker, George E. See Herrlich, Horst, **(82b:18004)**

18B20 Categories of machines, automata, operative categories [See also 03D05, 68Dxx, 68F10.]

Adámek, Jiří (with Koubek, Václav) Least fixed point of a functor. **82d:18004**

(with Ehrig, Hartmut; Šedivá-Trnková, Věra) On an equivalence of system-theoretical and categorical concepts. **82a:18001**

Ehrig, Hartmut See Adámek, Jiří; et al., **82a:18001**

Koubek, Václav See Adámek, Jiří, **82d:18004**

Radu, Alexandru Gh. (with Radu, Gheorghe Gh.) Existential and universal quantifiers in an elementary topos. **82c:18003**

Radu, Gheorghe Gh. See Radu, Alexandru Gh., **82c:18003**

Šedivá-Trnková, Věra See Adámek, Jiří; et al., **82a:18001**

secondary classifications:

Arbib, Michael A. (with Manes, Ernest G.) Machines in a category. **(82i:68037)**

Imori, Sueno On structure diagrams of languages. **(82a:68159)**

Lehmann, Daniel J. (with Smyth, Michael B.) Algebraic specification of data types: a synthetic approach. **(82j:68013)**

Manes, Ernest G. See Arbib, Michael A., **(82i:68037)**

Meseguer, José A Birkhoff-like theorem for algebraic classes of interpretations of program schemes. **(82m:68026)**

Penon, Jacques Infinitésimaux et intuitionisme. **(82m:51021)**

Šedivá-Trnková, Věra General theory of relational automata. **(82c:68058)**

Smyth, Michael B. See Lehmann, Daniel J., **(82j:68013)**

18B25 Topoi [See also 03G25.]

Acuña Ortega, Osvaldo Some results in the theory of lattices in an arbitrary topos. (Spanish) **82c:18004**

A note on the finiteness of an elementary Boolean topos. (Spanish) **82c:18005**

Bourn, Dominique Une autre propriété universelle pour le champ associé. **82c:18005**

Duskin, J. Higher-dimensional torsors and the cohomology of topos: the abelian theory. **82c:18006**

Genău, Mircea La catégorie des objets groupes abéliens dans un topos élémentaire est une catégorie abélienne. (Romanian summary) **82c:18007**

Howe, Douglas Module categories over topos. **82m:18002**

Johnstone, P. T. The Gleason cover of a topos. I. **82a:18002**

Factorization theorems for geometric morphisms. I. **82j:18007**

Leroy, Olivier ★Groupe de fondamental et théorème de van Kampen en théorie des topos. (French) [Fundamental groupoid and van Kampen theorem in topos theory] **82i:18006**

Paré, Robert Indexed categories and generated topologies. **82c:18008**

Rosebrugh, Robert On defining objects by recursion in a topos. **82c:18006**

Rousseau, Christiane Formes normales des matrices rectangulaires dans un topos et applications. **82c:18004**

Sergeev, V. M. On the structure of a topos on categories of topos-valued functors. (Russian. English summary) **82a:18003**

Tofan, I. Sur les catégories internes. **82c:18007**

Wraith, Gavin C. Localic groups. **82c:18008**

secondary classifications:

Banaschewski, B. Extension of invariant linear functionals: Hahn-Banach in the topos of M -sets. **(82c:46081)**

Boileau, André (with Joyal, André) La logique des topos. **(82a:03063)**

Coste, Michel (with Michon, Gérard) Petits et gros topos en géométrie algébrique. **(82g:14024)**

(with Coste-Roy, Marie-Françoise) Le topos étale réel d'un anneau. **(82h:14016)**

Coste-Roy, Marie-Françoise See Coste, Michel, **(82h:14016)**

Eytan, M. Fuzzy sets: a topos-logical point of view. **(82k:03087)**

Fourman, Michael P. Sheaf models for set theory. **(82i:03078)**

Freyd, Peter The axiom of choice. **(82i:03079)**

Joyal, André See Boileau, André, **(82a:03063)**

Keigher, William F. Differential algebra in a topos. **(82g:13022)**

Kock, Anders Formal manifolds and synthetic theory of jet bundles. **(82f:58006)**

Properties of well-adapted models for synthetic differential geometry. **(82f:58004)**

Lambek, J. (with Scott, P. J.) Intuitionist type theory and the free topos. **(82b:03112)**

Lawvere, F. William Toward the description in a smooth topos of the dynamically possible motions and deformations of a continuous body. **(82i:58015)**

Makkai, Michael The topos of types. **(82k:03103)**

Michon, Gérard See Coste, Michel, **(82g:14024)**

Petrescu, Ioana Existential morphisms and existentially closed models of logical categories. **(82k:03104)**

Scott, P. J. See Lambek, J., **(82b:03112)**

Veit, Barbara A proof of the associated sheaf theorem by means of categorical logic. **(82d:03103)**

Yoshida, Tomoyuki Transfer theory in topos. Use of finite group theory. (Japanese) **(82c:20035)**

18B30 Categories of topological spaces and continuous mappings [See also 54-XX.]

Börger, Reinhard (with Tholen, Walter) Remarks on topologically algebraic functors. **82j:18008**

Botnaru, D. V. Injective objects in relation to varieties. (Russian) **82b:18006**

Činčura, Juraj Reflective and coreflective subcategories of some category of generalized topological spaces. (Slovak and Russian summaries) **82f:18003**

On a tensor product in initially structured categories. (Russian summary)

82d:18005

Hoffmann, Rudolf-E. Essential extensions of T_1 -spaces. **82j:18009**

Tholen, Walter See Börger, Reinhard, **82j:18008**

secondary classifications:

Booth, Peter (with Tillotson, J.) Monoidal closed, Cartesian closed and convenient categories of topological spaces. **(82a:55021)**

Calude, C. (with Malitz, M.) On the category of Čech topological spaces. **(82c:54012)**

Carlson, John W. Prime extensions and nearness structures. **(82d:54032)**

Cerruti, Umberto The Stone-Čech compactification in the category of fuzzy topological spaces. **(82i:54018)**

Fedorčuk, V. V. Covariant functors in a category of compacta, absolute retracts and Q -manifolds. (Russian) **(82j:54013)**

Giuli, Eraldo Bases of topological epi-reflections. **(82b:54016)**

Heidermann, N. C. The category of D -completely regular spaces is simple. **(82d:54026)**

Hoffmann, Rudolf-E. Projective sober spaces. **(82b:54017)**

Reflective hulls of finite topological spaces. **(82f:54015)**

Ishii, Tadashi A product formula for the Tychonoff functor. **(82a:54019)**

Kawahara, Yasuo (with Minami, Toshiro) On the categories of complete Heyting algebras and topological spaces. **(82i:06013)**

Leseberg, D. Neighbourhood structures. **(82b:54018)**

Malitz, M. See Calude, C., **(82c:54012)**

Melton, Austin Which dispersed diafactorization structures on Top are hereditary? **(82g:54023)**

Minami, Toshiro See Kawahara, Yasuo, **(82i:06013)**

Nakagawa, Ryosuke Separation axioms and classes of morphisms in TOP. **(82b:54031)**

Nel, L. D. Universal topological algebra needs closed topological categories. **(82a:18007)**

Schwarz, Friedhelm Connections between convergence and nearness. **(82m:54023)**

Simmons, Harry Spaces with Boolean assemblies. **(82b:06010)**

Tillotson, J. See Booth, Peter, **(82a:55021)**

Wischnewsky, Manfred B. A lifting theorem for right adjoints. **(82i:54025)**

Woods, R. Grant Epireflective subcategories of Hausdorff categories. **(82j:54014)**

Wyller, Oswald Function spaces in topological categories. **(82m:54004)**

18B35 Preorders, orders and lattices (viewed as categories) [See also 06-XX.]

secondary classifications:

Nelson, Evelyn On exponentiating exponentiation. **(82c:18010)**

Pinus, A. G. A characterization of the category of linearly ordered sets. (Russian) **(82j:06001)**

Urastnev, D. D. Injective objects in the category of rigid commutative bands of algebras. (Russian) **(82j:06020)**

18B40 Groupoids, semigroupoids, semigroups, groups (viewed as categories) [See also 20Axx, 20Lxx, 20Mxx.]

Heath, Philip R. (with Kamps, Klaus Heiner) Groupoids, stability cokernel sequences and duality. **82c:18009**

Kamps, Klaus Heiner See Heath, Philip R., **82c:18009**

secondary classifications:

Fichtner, Konrad Ein Verfahren zur Ableitung der OD-Gruppoid-Familien von Brandtschen OD-Gruppoiden. **(82b:20079)**

18B99 None of the above, but in this section

Ansari, A. Halim See Khan, M. Zubair, **82g:18001**

Batbedat, André Le spectre plein d'un ensemble ordonné. **82b:18007**

Calenko, M. Š. See Talybov, M. A., **82d:18007**

Diers, Yves Catégories localement multiprésentables. [Locally multipresentable categories] **82m:18003b**

Quelques constructions de catégories multiprésentables. [Some constructions of multipresentable categories] **82m:18003c**

Dukarm, J. Weakly monadic Boolean extension functors. **82c:18010**

Fakir, Sabah Un théorème de Schanuel sur les foncteurs combinatoires. **82j:18010**

Golasinski, Marek The category of cubical sets and the category of small categories. (Russian summary) **82f:18004**

Gonzalez Dorrego, M. R. ★Producto de formaciones en una categoria de Burgin. (Spanish) [Product of formations in a Burgin category] **82b:18008**

Khan, M. Zubair (with Ansari, A. Halim) A note on certain subgroups of Hom. **82g:18001**

Niederle, Josef (with Polák, Libor) The category of nonindexed algebras and weak homomorphisms. **82d:18006**

Parodi, Franco The category of universes of devices and the category of T -algebras. (Italian) **82a:18004a**

Some properties of the category of T -algebras. (Italian) **82a:18004b**

Polák, Libor See Niederle, Josef, **82d:18006**

Talybov, M. A. (with Calenko, M. Š.) Classification of ordered categories with involution, generated by functional morphisms. (Russian) **82d:18007**
 Alšebra See Gonzalez Dorrego, M. R., **82b:18008**

secondary classifications:

Busneag, Dumitru Injective objects in the Hilbert algebras category. (**82f:06017**)
 Cerruti, Umberto Fibre-complete categories and fuzzy sets. (Italian. English summary) (**82b:03101**)
 Dégtev, A. N. A category of partial recursive functions. (Russian) (**82a:03037**)
 Diers, Yves Some spectra relative to functors. (**82j:18004**)
 Ehrig, Hartmut Introduction to the algebraic theory of graph grammars (a survey). (**82c:68073a**)
 Harper, L. H. The global theory of flows in networks. (**82j:05063**)
 Hejny, Milan Categories of Klein spaces. (Slovak and Russian summaries) (**82f:08006**)
 Maggolo-Schettini, Andrea An algebraic theory of structures and their derivations. (Italian) (**82c:68010**)
 Mihailov, E. N. Duality in categories of topological groups. (Russian) (**82e:22013**)
 Nadiu, Gh. S. Note on formal commutative Moufang loops. (Romanian. French summary) (**82c:20120**)
 Nagl, Manfred A tutorial and bibliographical survey on graph grammars. (**82c:68073b**)
 Small, Charles Some functors which lie between the additive and multiplicative groups of a ring. (**82d:16037a**)
 Corrections to: "Some functors which lie between the additive and multiplicative groups of a ring". (**82d:16037b**)
 Smyth, Michael B. Computability in categories. (**82c:68055**)
 Sturm, Teo Universal coretracts in some categories of chains and Boolean algebras. (**82d:06002**)
 Tholen, Walter MacNeille completion of concrete categories with local properties. (**82b:18003**)
 Urstaeve, D. D. Injective objects in the category of rigid commutative bands of algebras. (Russian) (**82j:06020**)

18Cxx Categories and algebraic theories

18C05 Equational categories [See also 03--XX, 08C05.]

Nel, L. D. Universal topological algebra needs closed topological categories. **82i:18007**
 Rosický, Jiří Equational categories. **82e:18011**

18C10 Theories (e.g. algebraic theories), structure, and semantics [See also 03--XX.]

Beck, Jon M. On the relationship between algebra and analysis. **82a:18005**
 Borceux, Francis Algebraic localizations and elementary toposes. **82g:18002**
 Diers, Yves Catégories multialgébriques. [Multialgebraic categories] **82m:18003a**
 Catégories multialgébriques. **82d:18008**
 Fox, Thomas F. The coalgebra enrichment of algebraic categories. **82g:18003**
 Lavendhomme, R. (with Roisin, J.-R.) Note on nonabelian cohomology. **82k:18005**
 (with Roisin, J.-R.) Cohomologie non abélienne de structures algébriques. **82g:18004**
 MacDonald, John L. Cohomology operations in a category. **82c:18009**
 Meseguer Gualta, José Varieties of chain-complete algebras. **82g:18005**
 Radu, Gheorghe Gh. (with Ștefănescu, Mirela; Tofan, I.) On algebraic theories. **82j:18011**
 Roisin, J.-R. See Lavendhomme, R., **82g:18004** and Lavendhomme, R., **82k:18005**
 Ștefănescu, Mirela See Radu, Gheorghe Gh.; et al., **82j:18011**
 Tofan, I. See Radu, Gheorghe Gh.; et al., **82j:18011**

secondary classifications:

Foltz, F. (with Lair, C.; Kelly, G. M.) Algebraic categories with few monoidal biclosed structures or none. (**82f:18009**)
 Johnstone, P. T. A syntactic approach to Diers' localizable categories. (**82k:03102**)
 Kelly, G. M. See Foltz, F.; et al., (**82f:18009**)
 Lair, C. See Foltz, F.; et al., (**82f:18009**)
 Parmigiani Bedogna, Daniela The SH formulas in reduced generalized powers. (Italian. English summary) (**82h:03023**)
 Street, Ross Cosmoi of internal categories. (**82a:18007**)

18C15 Triples (= standard construction, monad or triad), algebras for a triple, homology and derived functors for triples [See also 18Gxx.]

Barja Pérez, J. M. (with García-Rodeja Fernández, E.) The theorems of Morita in the category of sets. (Spanish) **82a:18006**
 (with Freire Nistal, J. L.) Associate triples. (Spanish) **82b:18009**
 (with López López, Miguel A.) The triple $\text{Hom}(M, -)$. (Spanish) **82b:18010**
 Diers, Yves Monades et multimónades de rang α sur les catégories localement α -multiprésentables. [Monads and multimónads of order α on locally α -multipresentable categories] **82k:18006**
 Freire Nistal, J. L. See Barja Pérez, J. M., **82b:18009**
 García-Rodeja Fernández, E. Groups with respect to a cotriple. (Spanish) **82f:18005**
 See also Barja Pérez, J. M., **82a:18006**
 Kelly, G. M. A unified treatment of transfinite constructions for free algebras, free monoids, colimits, associated sheaves, and so on. **82h:18003**
 López López, Miguel A. Adjoint Hopf algebras as Hopf modules. (Spanish) **82b:18011**
 See also Barja Pérez, J. M., **82b:18010**
 Wolff, Harvey Relative injectives and free monads. **82e:18012**

secondary classifications:

Basistov, A. A. Cohomology of groups with operators. (Russian. English summary) (**82b:20070**)
 Pedicchio, M. Cristina Relations between K -morphisms and lax algebras. (Italian. English summary) (**82h:18002**)
 Sekanina, Milan Algebren auf Graphen. (German) (**82d:05091**)

18C20 Algebras and Kleisli categories associated with monads

Barja Pérez, J. M. (with García-Rodeja Fernández, E.) Kleisli algebras. (Spanish) **82b:18012**
 García-Rodeja Fernández, E. See Barja Pérez, J. M., **82b:18012**

secondary classifications:

Kelly, G. M. Examples of nonmonadic structures on categories. (**82e:18013**)

18C99 None of the above, but in this section

Bargenda, Hubertus (with Richter, Günther) Varietal hulls of functors. **82h:18004**
 Diers, Yves Quelques constructions de catégories localement multiprésentables. **82f:18006**
 Krishnan, Viakathur Sankrithi Algebras over fine categories. **82k:18007**
 Richter, Günther See Bargenda, Hubertus, **82h:18004**
 Rosický, Jiří Concrete categories and infinitary languages. **82m:18004**

secondary classifications:

Adámek, Jiří (with Koubek, Václav) Least fixed point of a functor. (**82d:18004**)
 Courcelle, Bruno (with Raoult, Jean-Claude) Completions of ordered magmas. (**82b:68041**)
 Koubek, Václav See Adámek, Jiří, (**82d:18004**)
 Lehmann, Daniel J. On the algebra of order. (**82b:68042**)
 Raoult, Jean-Claude See Courcelle, Bruno, (**82b:68041**)

18Dxx Categories with structure

18D05 Double categories, 2-categories, bicategories, hypercategories

Arnaudov, Ja. N. See Topenčarov, Vladimir V., **82g:18006**
 Gray, John W. The existence and construction of lax limits. **82f:18007b**
 Closed categories, lax limits and homotopy limits. **82f:18007a**
 Rossi, Fabio Quasi-ends and a relative Yoneda lemma in the theory of relative bicategories. (Italian. English summary) **82f:18008**
 Topenčarov, Vladimir V. (with Arnaudov, Ja. N.) Sur la représentation binaire des catégories polyadiques. **82g:18006**

secondary classifications:

Botnaru, D. V. Injective objects in relation to varieties. (Russian) (**82b:18006**)
 Bourn, Dominique (with Cordier, Jean-Marc) Distributeurs et théorie de la forme. (**82f:55005**)
 Cordier, Jean-Marc See Bourn, Dominique, (**82f:55005**)
 García-Rodeja Fernández, E. Groups with respect to a cotriple. (Spanish) (**82f:18005**)
 Pedicchio, M. Cristina Relations between K -morphisms and lax algebras. (Italian. English summary) (**82h:18002**)

18D10 Monoidal categories (= multiplicative categories)

Foltz, F. (with Lair, C.; Kelly, G. M.) Algebraic categories with few monoidal biclosed structures or none. **82f:18009**
 Kasangian, Stefano (with Rossi, Fabio) Some remarks on symmetry for a monoidal category. **82g:18007**
 Kelly, G. M. See Foltz, F.; et al., **82f:18009**
 Lair, C. See Foltz, F.; et al., **82f:18009**
 Meseguer Gualta, José (with Sols Lucia, Ignacio) Categorical tensor representation of deterministic, relational and probabilistic finite functions. **82b:18013**
 Nelson, Evelyn Internal hom functors for polarities. **82j:18012**
 Nguyễn Duy Thuận \otimes -strict tau categories. **82j:18013**
 Rossi, Fabio See Kasangian, Stefano, **82g:18007**
 Solian, Alexandru Coherence in categorical groups. **82g:18008**
 Sols Lucia, Ignacio See Meseguer Gualta, José, **82b:18013**

secondary classifications:

May, J. P. Pairings of categories and spectra. (**82c:55010**)
 Nelson, Evelyn Categorical and topological aspects of formal languages. (**82a:68149**)
 Niwa, Masahiko Notes on K -theory of linear categories. III. (**82e:18018**)
 Puppe, Dieter Duality in monoidal categories and applications to fixed-point theory. (**82m:55011**)

18D15 Closed categories (closed monoidal and Cartesian closed categories, etc.)

Babaev, A. A. Equality of morphisms and the coherence theorem for biclosed categories. (Russian. English summary) **82k:18008**
 Ciługreanu, Grigore On an enriched theory of modules. I. (Romanian summary) **82b:18014**
 On an enriched theory of modules. II. (Romanian summary) **82j:18014**
 Frölicher, Alfred Catégories cartésiennement fermées engendrées par des monoides. **82i:18008**

- Kelly, G. M. Examples of nonmonadic structures on categories. **82c:18013**
 Nelson, Evelyn On exponentiating exponentiation. **82c:18010**
 Vorendou, Rodiani A coherence theorem for biclosed categories. **82j:18015a**
 Coherence in biclosed categories. **82j:18015b**

secondary classifications:

- Booth, Peter (with Tillotson, J.) Monoidal closed, Cartesian closed and convenient categories of topological spaces. **(82a:55021)**
 Činčura, Jura On a tensor product in initially structured categories. (Russian summary) **(82d:18005)**
 Fox, Thomas F. The coalgebra enrichment of algebraic categories. **(82g:18003)**
 Scott, Dana S. Relating theories of the λ -calculus. **(82d:03025)**
 Tillotson, J. See Booth, Peter, **(82a:55021)**

18D20 Enriched categories (over closed or monoidal categories)

- Kleisli, Heinrich Coshape-invariant functors and Mackey's induced representation theorem. **82c:18014**
 Lindner, Harald Center and trace. **82c:18010**

secondary classifications:

- Kasangian, Stefano (with Rossi, Fabio) Some remarks on symmetry for a monoidal category. **(82g:18007)**
 Rossi, Fabio See Kasangian, Stefano, **(82g:18007)**

18D25 Strong functors, strong adjunctions

18D30 Fibered categories

- Kumbhojkar, H. V. On the structure of initial objects of fibre categories. **82i:18009**

secondary classifications:

- Niwa, Masahiko Notes on K -theory of linear categories. III. **(82c:18018)**

18D35 Structured objects in a category (group objects, etc.)

- Street, Ross Cosmoi of internal categories. **82a:18007**

18D99 None of the above, but in this section

secondary classifications:

- Bargenda, Hubertus (with Richter, Günther) Varietal hulls of functors. **(82h:18004)**
 Brown, Ronald (with Higgins, Philip J.) On the algebra of cubes. **(82m:55015a)**
 (with Higgins, Philip J.) Colimit theorems for relative homotopy groups. **(82m:55015b)**
 Guitart, René Relations et carrés exacts. **(82i:18003)**
 Higgins, Philip J. See Brown, Ronald, **(82m:55015)**
 Lopez Lopez, M. P. ★Objetos de Galois sobre un algebra de Hopf finita. (Spanish) [Galois objects over a finite Hopf algebra] **(82c:18001)**
 Nguyễn Duy Thuận @-strict tau categories. **(82j:18013)**
 Richter, Günther See Bargenda, Hubertus, **(82h:18004)**
 Solian, Alexandru Coherence in categorical groups. **(82g:18008)**
 Van den Bril, Luc Carrés exacts de Hilton dans des contextes non abéliens. **(82i:18004)**

18Exx Abelian categories

18E05 Preadditive, additive categories

- Cooper, Yonina S. Stable sequences in pre-abelian categories. **82f:18011**
 Grigorjan, A. G. Rings of endomorphisms of modules over small preadditive categories. (Russian) **82j:18016**
 Lambek, J. Remarks on localization and duality. **82a:18008**
 Yu, Yong Xi The quasikernels in an n -preadditive category. (Chinese. English summary) **82f:18012**

18E10 Exact categories, abelian categories

- Datuashvili, T. I. The homological dimension of the extensions of abelian categories and rings. (Russian. Georgian and English summaries) **82k:18009**
 Grandis, Marco Some categories for Zeeman diagrams. (Italian summary) **82d:18009**

secondary classifications:

- Geamiu, Mircea La catégorie des objets groupes abéliens dans un topos élémentaire est une catégorie abélienne. (Romanian summary) **(82c:18007)**
 Simson, Daniel Corrigendum: "Pure semisimple categories and rings of finite representation type" [J. Algebra **48** (1977), no. 2, 290–296; MR **57** #380]. **(82d:16028)**

18E15 Grothendieck categories

- Mitchell, Barry A quick proof of the Gabriel-Popescu theorem. **82c:18015**
 Prest, Mike Elementary torsion theories and locally finitely presented categories. **82h:18015**
 Simson, Daniel On pure semisimple Grothendieck categories. II. **82i:18019**
 Verschoren, A. Tertiary decomposition in Grothendieck categories. **82f:18013**

secondary classifications:

- Stanton, Robert O. Decompositions of modules over a discrete valuation ring. **(82c:13012)**

18E20 Imbedding theorems [See also 18B15.]

18E25 Derived functors and satellites

18E30 Derived categories, triangulated categories

18E35 Localization of categories

- Ohtake, Koichiro A generalization of Kato's theorem on Morita duality. **82d:18010**

secondary classifications:

- Borceux, Francis Algebraic localizations and elementary toposes. **(82g:18002)**
 Mitchell, Barry A quick proof of the Gabriel-Popescu theorem. **(82c:18015)**
 Torrecillas Jover, B. ★Haz estructura sobre el espectro de un anillo no conmutativo. (Spanish) [The structure sheaf over the spectrum of a noncommutative ring] **(82g:16026)**
 Alxebra See Torrecillas Jover, B., **(82g:16026)**

18E40 Torsion theories, radicals [See also 13D30, 16A63.]

- Ikeyama, Tamotsu Correction to: "Splitting torsion theories" [Comm. Algebra **8** (1980), no. 13, 1267–1282; MR **81g:18016**]. **82a:18009**
 Verschoren, A. Fully bounded Grothendieck categories. I. Locally Noetherian categories. **82j:18017a**
 Addendum: "Fully bounded Grothendieck categories. I. Locally Noetherian categories". **82j:18017b**

secondary classifications:

- Mohamed, Saad (with Singh, Surjeet) Decomposition of σ -injective modules. **(82h:16017)**
 Ohtake, Koichiro A generalization of Kato's theorem on Morita duality. **(82d:18010)**
 van Oystaeyen, F. (with Verschoren, A.) Fully bounded Grothendieck categories. II. Graded modules. **(82j:16003)**
 Singh, Surjeet See Mohamed, Saad, **(82h:16017)**
 Verschoren, A. See van Oystaeyen, F., **(82j:16003)**

18E99 None of the above, but in this section

- Bullejos Lorenzo, Manuel ★Álgebra homológica relativa en categorías abelianas. (Spanish) [Relative homological algebra in abelian categories] **82j:18011**
 Emin, G. G. Varieties generated by a finite module and localizations in the category of modules over all rings. (Russian. Armenian and English summaries) **82j:18018**
 Mitchell, Barry A remark on projectives in functor categories. **82i:18012**
 Mora, Ferdinando Exactness in the symmetrizations of a left exact category. (Italian summary) **82i:18013**
 Porter, T. Stability of algebraic inverse systems. II. Purity and localization. **82a:18010**
 Sakalof, Stefan Projective functors on free categories. (Russian) **82h:18005**

secondary classifications:

- Guitart, René Relations et carrés exacts. **(82i:18003)**
 Hattori, Akira On Amitsur cohomology of rings of algebraic integers. **(82h:12012)**
 Howe, Douglas Module categories over topoi. **(82m:18002)**
 Năstăsescu, Constantin Théorème de Hopkins pour les catégories de Grothendieck. **(82a:16020)**
 Skljarenko, E. G. On the Manovcev-Kuz'minov theorem. (Russian) **(82j:20103)**

18Fxx Categories and geometry

18F05 Local categories and functors

18F10 Grothendieck topologies [See also 14F20.]

secondary classifications:

- Borceux, Francis Algebraic localizations and elementary toposes. **(82g:18002)**
 Paré, Robert Indexed categories and generated topologies. **(82c:18008)**

18F15 Abstract manifolds and fiber bundles [See also 55Rxx, 57Pxx.]

18F20 Presheaves and sheaves [See also 14F05, 32C35, 32L10, 54B40, 55N30.]

- Balogun, Bola O. Abelian sheaves over topological spaces. **82d:18011**
 Diers, Yves Un critère de représentabilité par sections continues de faisceaux. **82h:18006**
 Succi Cruciani, Rosanna Sheaves over a regular category. (Italian. French summary) **82h:18007**

secondary classifications:

- Banaschewski, B. Injective sheaves of abelian groups: a counterexample. **(82f:18015a)**
 Bingener, Jürgen Darstellbarkeitskriterien für analytische Funktoren. **(82i:32047)**
 Borceux, Francis Topologies sur un topos de faisceaux. (English summary) **(82c:54013)**
 Algebraic localizations and elementary toposes. **(82g:18002)**
 Dobbs, David E. Corrigendum: "On characterizing injective sheaves" [Canad. J. Math. **29** (1977), no. 5, 1031–1039; MR **56** #5685]. **(82f:18015b)**
 Lavendhomme, R. (with Roisin, J.-R.) Cohomologie non abélienne de structures algébriques. **(82g:18004)**
 Leroy, Olivier ★Groupoïde fondamental et théorème de van Kampen en théorie des

- topos. (French) [Fundamental groupoid and van Kampen theorem in topos theory] (82i:18006)
- Malgoire, J. (with Voisin, C.) Factorisation de Stein topologique; découpe. (82h:57013)
- Nelson, Evelyn On exponentiating exponentiation. (82c:18010)
- Paré, Robert Indexed categories and generated topologies. (82c:18008)
- Pechanec-Drabok, Jaroslav Equivalences in presheaves, functional separation of their inductive limits and representation by sections. (Russian summary) (82h:54019)
- Roisin, J.-R. See Lavendhomme, R., (82g:18004)
- Skurikhin, E. E. On the cohomology theory of completely regular spaces. (Russian) (82d:55006)
- Street, Ross Cosmoi of internal categories. (82a:18007)
- Tamme, Günter ★Einführung in die étale Kohomologie. (German) [Introduction to étale cohomology] (82j:14017)
- Voisin, C. See Malgoire, J., (82h:57013)
- Wraith, Gavin C. Localic groups. (82e:18008)
- 18F25 Algebraic K -theory and L -theory [See also 10Cxx, 12-XX, 13D15, 14Cxx, 16A54, 57R65, 57R67.]
- Almkvist, Gert Erratum: " K -theory of endomorphisms" [J. Algebra 55 (1978), no. 2, 308-340; MR 80i:18018]. 82h:18008
- Alperin, Roger C. $SL_2(\mathbb{Z}(1+\sqrt{5})/2)$. 82f:18014
- Carlsson, Gunnar (with Milgram, R. James) Some exact sequences in the theory of Hermitian forms. 82b:18016
- Dress, Andreas W. M. The Cartan map for equivariant higher algebraic K -groups. 82i:18014
- Grayson, Daniel R. SK_1 of an interesting principal ideal domain. 82m:18005
- Guin-Waléry, Dominique (with Loday, Jean-Louis) Obstruction à l'excision en K -théorie algébrique. 82h:18009a
- Harsiladze, A. F. Construction of a complement in Hermitian K -theory. (Russian) 82d:18012a
- Hermitian K -theory and quadratic extensions of rings. (Russian) 82d:18012b
- Wall groups of elementary 2-groups. (Russian) 82d:18013
- Hiller, Howard L. λ -rings and algebraic K -theory. 82e:18016
- van der Kallen, Wilberd Homology stability for linear groups. 82c:18011
- Karoubi, Max Le théorème fondamental de la K -théorie hermitienne. 82h:18010
- Théorie de Quillen et homologie du groupe orthogonal. 82h:18011
- Kassel, Christian K -théorie relative d'un idéal bilatère de carré nul: étude homologique en basse dimension. 82i:18015
- Loday, Jean-Louis On the boundary map $K_3(\Lambda/I) \rightarrow K_2(\Lambda/I)$. 82h:18009b
- See also Guin-Waléry, Dominique, 82h:18009a
- Milgram, R. James See Carlsson, Gunnar, 82b:18016
- Munkholm, Hans J. Transfer on algebraic K -theory and Whitehead torsion for PL fibrations. 82d:18014
- Mustafa-zade, N. M. On universality for GEU unitary rings. (Russian) 82e:18017
- Epimorphic stability of the unitary K_2 -functor. (Russian) 82j:18020
- Nemytov, A. I. (with Solov'ev, Ju. P.) Homotopy multiplication in the classifying spaces of Hermitian K -theory. (Russian) 82j:18021
- Niwa, Masahiko Notes on K -theory of linear categories. III. 82e:18018
- Oliver, Robert SK_1 for finite group rings. II. 82m:18006a
- SK_1 for finite group rings. III. 82m:18006b
- Correction to: " SK_1 for finite group rings. I" [Invent. Math. 57 (1980), no. 2, 183-204; MR 81f:18031]. 82j:18019
- Pirashvili, T. I. Spectral sequence of the epimorphism for (co)homology of groups and algebraic K -functors. (Russian. Georgian and English summaries) 82m:18007
- Quebbemann, Heinz-Georg (with Scharlau, Winfried; Schulte, M.) Quadratic and Hermitian forms in additive and abelian categories. 82d:18015
- Rehmann, U. Kommutatoren in $GL_n(D)$. (See 82b:16014)
- Scharlau, Winfried See Quebbemann, Heinz-Georg; et al., 82d:18015
- Schulte, M. See Quebbemann, Heinz-Georg; et al., 82d:18015
- Solov'ev, Ju. P. See Nemytov, A. I., 82j:18021
- Stein, Michael R. Maps of rings which induce surjections on K_3 . 82e:18019
- Suslin, A. A. On the equivalence of K -theories. 82m:18008
- Vogtmann, Karen Spherical posets and homology stability for $O_{n,n}$. 82d:18016
- Weibel, Charles A. K_2 , K_3 and nilpotent ideals. 82i:18016
- Mayer-Vietoris sequences and module structures on NK_* . 82k:18010
- A survey of products in algebraic K -theory. 82k:18011
- K -theory of Azumaya algebras. 82d:18017
- secondary classifications:
- Allard, Jacques (with Lam, Kee Yuen) Freeness of orthogonal modules. (82j:13019)
- Bak, Anthony (with Kolster, Manfred) The computation of odd-dimensional projective surgery groups of finite groups. (82j:57032)
- Bloch, Spencer ★Lectures on algebraic cycles. (82e:14012)
- Browkin, Jerzy The functor K_2 in algebraic number theory. (Polish. English summary) (82f:12015)
- Chaladus, Stefan Lower bounds of the order of $K_2(\mathbb{Z}G)$ for a cyclic p -group G . (Russian summary) (82e:13013)
- tom Dieck, Tammo Über projektive Moduln und Endlichkeitshindernisse bei Transformationsgruppen. (English summary) (82k:57028)
- Draxl, Peter Corps gauches à involution de deuxième espèce. (82g:12013)
- Fossum, Robert M. A characteristic class in algebraic K -theory. (See 82m:13001)
- Friedlander, Eric M. Étale K -theory. I. Connections with étale cohomology and algebraic vector bundles. (82e:14029)
- See also Algebraic K -theory, (82e:18001)
- Geller, Susan C. (with Weibel, Charles A.) K_2 measures excision for K_1 . (82c:13018)
- Gillet, Henri Riemann-Roch theorems for higher algebraic K -theory. (82d:14006)
- Grayson, Daniel R. Localization for flat modules in algebraic K -theory. (82e:14011)
- Dilogarithm computations for K_3 . (82i:12012)
- van der Kallen, Wilberd Stability for K_2 of Dedekind rings of arithmetic type. (82j:13010)
- Kandelaki, T. K. A theorem of stability in K -theory of C^* -algebras. (Russian. Georgian and English summaries) (82h:46073)
- Keune, Frans Doubly relative K -theory and the relative K_3 . (82g:16023)
- Another presentation for the K_2 of a local domain. (82k:12018)
- Kolster, Manfred See Bak, Anthony, (82j:57032)
- Lam, Kee Yuen See Allard, Jacques, (82j:13019)
- Loday, Jean-Louis Symboles en K -théorie algébrique supérieure. (English summary) (82f:13005)
- Parimala, Raman Nonextended quadratic forms over polynomial rings over power series rings. (82m:15029)
- Pedersen, Erik Kjaer Universal geometric examples for transfer maps in algebraic K - and L -theory. (82i:57028)
- Phillips, John (with Raeburn, Iain) Automorphisms of C^* -algebras and second Čech cohomology. (82h:46089)
- Plotnick, Steven P. Vanishing of Whitehead groups for Seifert manifolds with infinite fundamental group. (82i:57020)
- Pridy, Stewart On a conjecture concerning $K_*(\mathbb{Z}/p^2)$. (82i:55017)
- Raeburn, Iain On the Picard group of a continuous trace C^* -algebra. (82h:46090)
- See also Phillips, John, (82h:46089)
- Ranicki, Andrew ★Exact sequences in the algebraic theory of surgery. (82h:57027)
- Ren, Hong Shuo Automorphisms of $SL_2(k)$ over a class of skew fields. (Chinese) (82k:20071)
- Šemrl, V. V. The Riemann-Roch theorem and the Atiyah-Hirzebruch spectral sequence. (Russian) (82e:14028)
- Shapiro, Jack M. Relations between the Milnor and Quillen K -theory of fields. (82f:12016)
- Sherman, Clayton Cartan maps, clean rings, and unique factorization. (82h:13010)
- Solov'ev, Ju. P. Signature realizable subgroups of the Wall group. (Russian) (82k:57024)
- Soulé, Christophe K -théorie et corps cyclotomiques. [K -theory and cyclotomic fields] (See 82m:10006)
- K -théorie et correspondances algébriques. (English summary) (82i:14012)
- (Stein, Michael R.) See Algebraic K -theory, (82e:18001)
- Steiner, Richard J. Infinite loop structures on the algebraic K -theory of spaces. (82m:55013)
- Weibel, Charles A. See Geller, Susan C., (82c:13018)
- Algebraic K -theory ★Algebraic K -theory, Evanston 1980. (82e:18001)
- Conference:
- Algebraic K -Theory ★Algebraic K -theory, Evanston 1980. (82e:18001)
- Evanston, Ill. ★Algebraic K -theory, Evanston 1980. (82e:18001)
- 18F30 Grothendieck groups [See also 13D15, 16A54.]
- 18F99 None of the above, but in this section
- secondary classifications:
- Verschoren, A. Fully bounded Grothendieck categories. I. Locally Noetherian categories. (82j:18017a)
- Addendum: "Fully bounded Grothendieck categories. I. Locally Noetherian categories". (82j:18017b)
- 18Gxx Homological algebra [See also 55Uxx.]
- Bourbaki, Nicolas ★Éléments de mathématique. (French) [Elements of mathematics] 82j:18022
- secondary classifications:
- Northcott, D. G. ★A first course of homological algebra. (82k:18001)
- 18G05 Projectives and injectives [See also 13C10, 13C11, 16A50, 16A52.]
- Banaschewski, B. Injective sheaves of abelian groups: a counterexample. 82f:18015a
- Dobbs, David E. Corrigendum: "On characterizing injective sheaves" [Canad. J. Math. 29 (1977), no. 5, 1031-1039; MR 56 #5685]. 82f:18015b
- Kadrov, A. Projective objects and absolutes for G -spaces. (Russian) 82m:18009
- secondary classifications:
- Webb, P. J. The projective extensions of a finite group. (82m:20006)
- 18G10 Resolutions; derived functors [See also 18E25.]
- Šarko, V. V. Stable algebra and Morse theory. (Russian) 82g:18009
- secondary classifications:
- Carlson, Jon F. The structure of periodic modules over modular group algebras. (82i:20005)
- Eisenbud, David Homological algebra on a complete intersection, with an application to group representations. (82d:13013)
- Green, Edward L. Remarks on projective resolutions. (82b:16024)
- 18G15 Ext and Tor, generalizations, Künneth formula [See also 55U25.]
- Hardie, K. A. Bifunctors and the diagonal exact sequences of a cylinder-web diagram. 82k:18012
- Jara Martinez, P. ★ (G, n) -extensiones especiales en la cohomología de grupos. (Spanish) [Special (G, n) -extensions in the cohomology of groups] 82e:18020

Mdzinarishvili, L. D. On K nneth's relation and the functor \lim . (Russian. Georgian and English summaries) **82f:18016**

Rodr guez Fern ndez, C. \star Invariantes de Baer y cohomolog a en variedades de Ω -grupos. (Spanish) [Baer invariants and cohomology in varieties of Ω -groups] **82f:18017**

Vernani, L. R. A note on Yoneda product. **82e:18017**

Algebra See Jara Mart nez, F., **82e:18020** and Rodr guez Fern ndez, C., **82f:18017**

secondary classifications:

Axelsson, Reynir (with Schumacher, Georg) Eine K nneth-Formel f r die

Tangentialkohomologie kompakter komplexer R ume. (**82g:32023**)

Cooper, Yonina S. Stable sequences in pre-abelian categories. (**82f:18011**)

Huber, Martin See Warfield, R. B., Jr., (**82h:20077**)

Kobelsk i, V. L. Certain properties of the homology of spaces covering smooth manifolds. (Russian) (**82g:57082**)

Schumacher, Georg See Axelsson, Reynir, (**82g:32023**)

Shelah, Saharon The consistency of $\text{Ext}(G, \mathbb{Z}) = \mathbb{Q}$. (**82k:03084**)

Warfield, R. B., Jr. (with Huber, Martin) On the values of the functor \lim^1 . (**82h:20077**)

18G20 Homological dimension [See also **13Dxx**, **16A60**, **16A62**.]

Balcerzyk, Stanislaw The cohomological dimension of the ordered set of real numbers equals three. **82h:18012**

Cheng, Charles Ching An (with Shapiro, Jay) Cohomological dimension of an abelian monoid. **82d:18018**

Shapiro, Jay See Cheng, Charles Ching An, **82d:18018**

secondary classifications:

Dicks, Warren An exact sequence for rings of polynomials in partly commuting indeterminates. (**82m:16024**)

Mitchell, Barry A remark on projectives in functor categories. (**82i:18012**)

18G25 Relative homological algebra, projective classes

Yoshida, Tomoyuki Transfer theorems. **82h:18013**

18G30 Simplicial sets, simplicial objects (in a category) [See also **55U10**.]

Farner, Frank D. Cellular homology for posets. **82h:18013**

Fritsch, Rudolf (with Latch, Dana May) Homotopy inverses for nerve. **82m:18010**

Latch, Dana May See Fritsch, Rudolf, **82m:18010**

Ruiz Salguero, Roberto Relative subdivisions. (Spanish) **82c:18012**

secondary classifications:

Mielke, M. V. The interval in algebraic topology. (**82g:55013**)

18G35 Chain complexes [See also **18E30**, **55U15**.]

Mitchell, W. J. R. Universal coefficient theorems and a paper of Dinh The Luc. **82h:18017**

18G40 Spectral sequences, hypercohomology [See also **55Tx**.]

secondary classifications:

Grandis, Marco Some categories for Zeeman diagrams. (Italian summary) (**82d:18009**)

Holt, D. F. Exact sequences in cohomology and an application. (**82h:20063**)

Rakviashvili, G. G. Periodicity of the Tate cohomologies of crossed group rings. (Russian. Georgian and English summaries) (**82e:16018**)

18G50 Nonabelian homological algebra

secondary classifications:

Kim, Ki Hang (with Makar-Limanov, L. G.; Neggers, Joseph; Roush, Fred William) Graph algebras. (**82e:05114a**)

(with Roush, Fred William) Homology of certain algebras defined by graphs. (**82e:05114b**)

Lavendhomme, R. (with Roisin, J.-R.) Note on nonabelian cohomology. (**82k:18005**)

Makar-Limanov, L. G. See Kim, Ki Hang; et al., (**82e:05114a**)

Neggers, Joseph See Kim, Ki Hang; et al., (**82e:05114a**)

Roisin, J.-R. See Lavendhomme, R., (**82k:18005**)

Roush, Fred William See Kim, Ki Hang; et al., (**82e:05114a**)

18G55 Nonabelian homotopical algebra

secondary classifications:

Brown, Ronald (with Higgins, Philip J.) On the algebra of cubes. (**82m:55015a**)

(with Higgins, Philip J.) Colimit theorems for relative homotopy groups. (**82m:55015b**)

Higgins, Philip J. See Brown, Ronald, (**82m:55015a**)

18G99 None of the above, but in this section

Bueso Montero, J. L. \star Invariantes de Baer en una categoria de Kurosh. (Spanish) [Baer invariants in a Kurosh category] **82a:18011**

Buniatov, M. R. (with Kasimov, V. A.) Homology of chain complexes of abstract Boolean algebras. (Russian) **82d:18019**

Cegarra, A. M. See Grandjean, A. R., **82k:18014**

Grandjean, A. R. (with Cegarra, A. M.) Cohomology with respect to a variety of a category. (Spanish) **82k:18014**

Kasimov, V. A. See Buniatov, M. R., **82d:18019**

Algebra See Bueso Montero, J. L., **82a:18011**

secondary classifications:

Bj rner, Anders Homotopy type of posets and lattice complementation. (**82k:06001**)

Bullejos Lorenzo, Manuel \star Algebra homol gica relativa en categor as abelianas. (Spanish) [Relative homological algebra in abelian categories] (**82e:18011**)

Datuašvili, T. I. The homological dimension of the extensions of abelian categories and rings. (Russian. Georgian and English summaries) (**82k:18009**)

Friedlander, Eric M. (with Parshall, Brian)  tale cohomology of reductive groups. (**82m:14008**)

Inoue, Yoshihiro Abstract homology theory. (**82i:55004**)

Kock, Anders Properties of well-adapted models for synthetic differential geometry. (**82f:58004**)

Latch, Dana May A fibred homotopy equivalence and homology theories for the category of small categories. (**82j:55008**)

Parshall, Brian See Friedlander, Eric M., (**82m:14008**)

Rosenberg, Jonathan (with Schochet, Claude) The classification of extensions of C^* -algebras. (**82a:46066**)

Schochet, Claude See Rosenberg, Jonathan, (**82a:46066**)

Sjogren, J. A. Dimension and lower central subgroups. (**82j:20080**)

Stienstra, Jan On K_2 and K_3 of truncated polynomial rings. (**82k:13016**)

Vorst, Ton Polynomial extensions and excision for K_1 . (**82a:13002**)

Yoshida, Tomoyuki Transfer theory in topoi. Use of finite group theory. (Japanese) (**82e:20035**)

20-XX GROUP THEORY AND GENERALIZATIONS

20-01 Elementary exposition, textbooks

Cohen, Arjeh M. (with Wilbrink, H. A.) \star Eindige groepen. (Dutch) [Finite groups] **82a:20001**

McDonough, T. P. Two group isomorphisms and a little projective geometry. **82j:20001**

Moore, T. E. Isomorphisms between groups of rational numbers. **82e:20001**

Neumann, Peter M. (with Stoy, Gabri lle A.; Thompson, E. C.) \star Groups and geometry. Vol. I. **82j:20002a**

(with Stoy, Gabri lle A.; Thompson, E. C.) \star Groups and geometry. Vol. II. **82j:20002b**

Stoy, Gabri lle A. See Neumann, Peter M.; et al., **82j:20002a** and Neumann, Peter M.; et al., **82j:20002b**

Suzuki, Michio \star Gun ron. Vol. I. (Japanese) [Group theory. Vol. I] **82k:20001a**

\star Gun ron. Vol. 2. (Japanese) [Group theory. Vol. 2] **82k:20001b**

\star Group theory. I. **82k:20001c**

Thompson, E. C. See Neumann, Peter M.; et al., **82j:20002**

Wilbrink, H. A. See Cohen, Arjeh M., **82a:20001**

secondary classifications:

Ehrlich, Gertrude See Goldhaber, Jacob K., (**82a:00004**)

Goldhaber, Jacob K. (with Ehrlich, Gertrude) \star Algebra. (**82a:00004**)

Kapur, J. N. \star Transformation geometry. (**82a:51001**)

Kostrikin, A. I. (with Manin, Ju. I.) \star Линеарная алгебра и геометрия. (Russian) [Linear algebra and geometry] (**82i:00008**)

Manin, Ju. I. See Kostrikin, A. I., (**82i:00008**)

20-02 Advanced exposition (research surveys, monographs, etc.)

Coxeter, Harold Scott MacDonald (with Moser, William O. J.) \star Порождающие элементы и определяющие соотношения дискретных групп. (Russian) [Generators and relations for discrete groups] **82c:20002**

( rkin, V. A.) See Coxeter, Harold Scott MacDonald; et al., **82c:20002**

Curtis, Charles W. (with Reiner, Irving) \star Methods of representation theory. Vol. I. **82i:20001**

Hochschild, Gerhard P. \star Basic theory of algebraic groups and Lie algebras. **82i:20002**

Merzljakov, Ju. I. \star Рациональные группы. (Russian) [Rational groups] **82m:20001**

State of problems from the *Kourovka notebook* toward the end of the 1970s. (Russian) **82f:20004**

See also Coxeter, Harold Scott MacDonald; et al., **82c:20002**

Moser, William O. J. See Coxeter, Harold Scott MacDonald, **82c:20002**

M ller, Wolfgang \star Darstellungstheorie von endlichen Gruppen. (German)

[Representation theory of finite groups] **82f:20001**

Reiner, Irving See Curtis, Charles W., **82i:20001**

Speiser, Andreas \star Die Theorie der Gruppen von endlicher Ordnung. (German) [The theory of groups of finite order] **82j:20003**

secondary classifications:

Aschbacher, Michael The classification of the finite simple groups. (**82h:20016**)

Brauer, Richard Symmetrische Funktionen. Invarianten von linearen Gruppen endlicher Ordnung. (**82i:13001**)

Bryniaki, Maciej (with Jurkiewicz, Jerzy) \star Zbi r zada n z algebry. (Polish) [A collection of problems in algebra] (**82k:00009**)

Fuchs, L szl  \star Abelian p -groups and mixed groups. (**82f:20081**)

- Gorenstein, Daniel An outline of the classification of finite simple groups. (82c:20030)
 Jurkiewicz, Jerzy See Brylinski, Maciej, (82f:00009)
 Stillwell, John C. ★Classical topology and combinatorial group theory. (82h:57001)

20-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Dubreil, Paul Apparition et premiers développements de la théorie des demi-groupes en France. (See 81a:20004)
 Waterhouse, William C. The early proofs of Sylow's theorem. (82i:01034)

20-04 Explicit machine computation and programs (not the theory of computation or programming)

- Alford, W. A. (with Pietsch, Bodo) An application of the nilpotent quotient program. 82d:20001
 Bodnarčuk, Ju. V. (with Kalužnin, L. A.) An algorithm for generation of permutations that preserve a given relation. (Russian) 82f:20002
 Cannon, John J. Effective procedures for the recognition of primitive groups. 82f:20003
 Software tools for group theory. 82f:20003
 Felsch, Volkmar (with Neubüser, Joachim) An algorithm for the computation of conjugacy classes and centralizers in p -groups. 82d:20003
 Havas, George (with Newman, M. F.) Application of computers to questions like those of Burnside. 82d:20002
 Kalužnin, L. A. See Bodnarčuk, Ju. V., 82f:20002
 Komissarčik, E. A. Organization of a computer program for enumerating simple groups with a small number of conjugacy classes. (Russian) 82c:20002
 Leon, Jeffrey S. Finding the order of a permutation group. 82c:20003
 On an algorithm for finding a base and a strong generating set for a group given by generating permutations. 82c:20004
 Neubüser, Joachim See Felsch, Volkmar, 82d:20003
 Newman, M. F. See Havas, George, 82d:20002
 Pietsch, Bodo See Alford, W. A., 82d:20001

secondary classifications:

- Čeredničenko, N. I. See Višinskii, V. A.; et al., (82f:20013)
 Dinitz, J. H. (with Stinson, D. R.) A fast algorithm for finding strong starters. (82c:05033)
 Felsch, Volkmar The computation of a counterexample to the class-breadth conjecture for p -groups. (82i:20034)
 Glazunov, N. M. Algorithms for calculation of cohomology groups of finite groups. I. (Russian) (82f:20080)
 Havas, George (with Richardson, J. S.; Sterling, Leon S.) The last of the Fibonacci groups. (82j:20068)
 Hermanns, Franz-Josef On certain groups of exponent eight generated by three involutions. (82g:20059)
 Jürgensen, H. Transformationendarstellungen endlicher abstrakt präsentierter Halbgruppen. (English summary) (82g:20104)
 Klin, M. H. See Višinskii, V. A.; et al., (82f:20013)
 Land, Rudolf Computation of Polya polynomials of primitive permutation groups. (82c:20010)
 Lusk, E. L. See Winker, S. K.; et al., (82c:20103)
 Mirman, R. See Soto, M. F., Jr., (82j:20027a) and (82j:20027b)
 Richardson, J. S. See Havas, George; et al., (82j:20068)
 Rodemich, Eugene R. The groups of order 128. (82c:20048)
 Sergienko, V. I. An algorithm for calculating products in corepresentations of finite groups. (Russian) (82c:20045)
 Soto, M. F., Jr. (with Mirman, R.) Objects for the symmetric group. (82j:20027a) (with Mirman, R.) Addendum: "Objects for the symmetric group". (82j:20027b)
 Sterling, Leon S. See Havas, George; et al., (82j:20068)
 Stinson, D. R. See Dinitz, J. H., (82c:05033)
 Vasil'ev, Ju. P. On the question of description by computer of finite groups into which an amalgam of groups is imbedded. (Russian) (82h:20030)
 Višinskii, V. A. (with Klin, M. H.; Čeredničenko, N. I.) Realization of an algorithm for construction of S -rings of cyclic groups of order p^m and its application for solution of the problem of cataloguing cyclic p^m -vertices of graphs. (Russian) (82f:20013)
 Winker, S. K. (with Wos, L.; Lusk, E. L.) Semigroups, antiautomorphisms, and involutions: a computer solution to an open problem. I. (82d:20103)
 Wos, L. See Winker, S. K.; et al., (82d:20103)

20-06 Proceedings, conferences, etc.

- (Amayo, Ralph K.) See Algebra, 82d:20004
 (Borevič, Z. I.) See Modules and linear groups, 82f:20006
 (Černikov, S. M.) See Constructive description of groups with properties prescribed on their subgroups, 82c:20004 and All-Union Symposium: Group Theory, 82d:20005
 (Čurkin, V. A.) See Kourouva notebook, 82f:20005
 (Durakov, B. K.) See All-Union Conference: Algebra, 82h:20001a
 (Glazunov, N. M.) See Computations in algebra, number theory and combinatorics, 82d:20006
 (Jürgensen, H.) See Semigroups, 82f:20009
 (Kalužnin, L. A.) See Computations in algebra, number theory and combinatorics, 82d:20006
 (Lajos, Sándor) See Notes on semigroups, 82f:20007
 (Mazurov, V. D.) See Kourouva notebook, 82f:20005
 (Merzljakov, Ju. I.) See Isomorphisms of classical groups over integral rings, 82b:20001 and Kourouva notebook, 82f:20005

- (Monahov, V. S.) See Subgroup structure of finite groups, 82j:20004
 (Murata, Kentaro) See Proceedings: Symposium on Semigroups, 82f:20008
 (Petrich, Mario) See Semigroups, 82f:20009
 (Skopin, A. I.) See Modules and linear groups, 82f:20006
 (Weinert, Hanns Joachim) See Semigroups, 82f:20009
 Algebra ★XV Всесоюзная Алгебраическая Конференция. Часть Первая. (Russian) [Fifteenth All-Union Algebra Conference. Part I] 82h:20001a
 ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] 82d:20006
 ★Algebra, Carbondale 1980. 82d:20004
 All-Union Conference: Algebra ★XV Всесоюзная Алгебраическая Конференция. Часть Первая. (Russian) [Fifteenth All-Union Algebra Conference. Part I] 82h:20001a
 All-Union Symposium: Group Theory ★VI Всесоюзный Симпозиум по Теории Групп. (Russian) [Sixth All-Union Symposium on Group Theory] 82d:20005
 ★Коуровская тетрадь: нерешенные задачи теории групп. (Russian) [Kourouva notebook: unsolved problems in group theory] 82f:20005
 Carbondale, Ill. ★Algebra, Carbondale 1980. 82d:20004
 Čerkassy ★VI Всесоюзный Симпозиум по Теории Групп. (Russian) [Sixth All-Union Symposium on Group Theory] 82d:20005
 Combinatorics ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] 82d:20006
 Computations in algebra, number theory and combinatorics ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] 82d:20006
 Conference: Semigroups ★Semigroups. 82f:20009
 Southern Illinois, Algebra ★Algebra, Carbondale 1980. 82d:20004
 Constructive description of groups with properties prescribed on their subgroups ★Конструктивное описание групп с заданными свойствами подгрупп. (Russian) [Constructive description of groups with properties prescribed on their subgroups] 82c:20004
 Finite group theory and neighboring areas ★Finite group theory and neighboring areas. (Japanese) 82g:20001
 Gornel' ★Подгрупповое строение конечных групп. (Russian) [Subgroup structure of finite groups] 82j:20004
 Group theory ★Конструктивное описание групп с заданными свойствами подгрупп. (Russian) [Constructive description of groups with properties prescribed on their subgroups] 82c:20004
 ★VI Всесоюзный Симпозиум по Теории Групп. (Russian) [Sixth All-Union Symposium on Group Theory] 82d:20005
 ★Коуровская тетрадь: нерешенные задачи теории групп. (Russian) [Kourouva notebook: unsolved problems in group theory] 82f:20005
 ★Algebra, Carbondale 1980. 82d:20004
 Isomorphisms of classical groups over integral rings ★Изоморфизмы классических групп над целыми кольцами. (Russian) [Isomorphisms of classical groups over integral rings] 82b:20001
 Kourouva notebook ★Коуровская тетрадь: нерешенные задачи теории групп. (Russian) [Kourouva notebook: unsolved problems in group theory] 82f:20005
 Krasnoyarsk ★XV Всесоюзная Алгебраическая Конференция. Часть Первая. (Russian) [Fifteenth All-Union Algebra Conference. Part I] 82h:20001a
 Lie algebras ★Algebra, Carbondale 1980. 82d:20004
 Linear groups ★Модули и линейные группы. (Russian) [Modules and linear groups] 82f:20006
 Modules and linear groups ★Модули и линейные группы. (Russian) [Modules and linear groups] 82f:20006
 Notes on semigroups ★Notes on semigroups. VI. 82f:20007
 Number theory ★Вычисления в алгебре, теории чисел и комбинаторике. (Russian) [Computations in algebra, number theory and combinatorics] 82d:20006
 Oberwolfach ★Semigroups. 82f:20009
 Problems: Group theory ★Коуровская тетрадь: нерешенные задачи теории групп. (Russian) [Kourouva notebook: unsolved problems in group theory] 82f:20005
 Proceedings: Symposium on Semigroups ★Proceedings of the 4th Symposium on Semigroups. 82f:20008
 Semigroups ★Notes on semigroups. VI. 82f:20007
 ★Proceedings of the 4th Symposium on Semigroups. 82f:20008
 ★Semigroups. 82f:20009
 Semigroups and related topics ★Semigroups and related topics. (Japanese) 82a:20002
 Seminar: Gornel', Algebraic ★Подгрупповое строение конечных групп. (Russian) [Subgroup structure of finite groups] 82j:20004
 Shushenskoe ★Коуровская тетрадь: нерешенные задачи теории групп. (Russian) [Kourouva notebook: unsolved problems in group theory] 82f:20005
 Subgroup structure of finite groups ★Подгрупповое строение конечных групп. (Russian) [Subgroup structure of finite groups] 82j:20004
 Symposium: Finite Group Theory and Neighboring Areas ★Finite group theory and neighboring areas. (Japanese) 82g:20001
 Semigroups ★Proceedings of the 4th Symposium on Semigroups. 82f:20008
 Semigroups and Related Topics ★Semigroups and related topics. (Japanese) 82a:20002
 Yamaguchi ★Proceedings of the 4th Symposium on Semigroups. 82f:20008

secondary classifications:

- (Horwitz, L. P.) See Group theoretical methods in physics, (82h:81004)
 (Ne'eman, Yoram) See Group theoretical methods in physics, (82h:81004)

(Šelehov, A. M.) See *Webs and quasigroups*, (82k:53003)

(Zamorzaev, A. M.) See *All-Union Symposium: Theory of Symmetry and its Generalizations*, (82g:51020)

All-Union Symposium:

Theory of Symmetry and its Generalizations ★ Всесоюзный Симпозиум по Теории Симметрии и ее Обобщениям. (Russian) [All-Union Symposium on the Theory of Symmetry and its Generalizations] (82g:51020)

Colloquium:

Group Theoretical Methods in Physics ★ Group theoretical methods in physics. (82h:81004)

DeKalb, III. ★ Proceedings of a Symposium on Regular Semigroups. (82j:20120)

Group theoretical methods in physics ★ Group theoretical methods in physics. (82h:81004)

Kiryat Anavim ★ Group theoretical methods in physics. (82h:81004)

Physics ★ Group theoretical methods in physics. (82h:81004)

Proceedings:

Symposium on Regular Semigroups ★ Proceedings of a Symposium on Regular Semigroups. (82j:20120)

Regular semigroups ★ Proceedings of a Symposium on Regular Semigroups. (82j:20120)

Symposium: Regular Semigroups ★ Proceedings of a Symposium on Regular Semigroups. (82j:20120)

Theory of symmetry ★ Всесоюзный Симпозиум по Теории Симметрии и ее Обобщениям. (Russian) [All-Union Symposium on the Theory of Symmetry and its Generalizations] (82g:51020)

Webs and quasigroups ★ Ткани и квазигруппы. (Russian) [Webs and quasigroups] (82k:53003)

20Axx Foundations

20A05 Axiomatics and elementary properties

Lenzi, Domenico On certain systems of group axioms defined with respect to the power set of the field of a ternary relation. (Italian. English summary) 82b:20002a

A generalization of certain systems of group axioms relative to the family of successive power sets of the field of a ternary relation. (Italian. English summary) 82b:20002b

MacHale, Desmond Minimum counterexamples in group theory. 82a:20003

Masat, Francis E. A note on normal subgroups and reflexive subsemigroups. 82a:20004

Neumann, Bernhard Another single law for groups. 82g:20002

Stojaković, Mirko D. On a formal language for group theory. (Serbo-Croatian. English summary) 82b:20003

secondary classifications:

Abu-Khuzam, Hazar (with Yaqub, Adil) Rings and groups with commuting powers. (82d:16031)

Schmidt, Heinz-Jürgen ★ Axiomatic characterization of physical geometry. (82f:51016)

Yaqub, Adil See Abu-Khuzam, Hazar, (82d:16031)

20A10 Metamathematical considerations {For word problems, see 20F10.}

secondary classifications:

Goralčik, Pavel See Goralčiková, Alla; et al., (82b:03088)

Goralčiková, Alla (with Goralčik, Pavel; Koubek, Václav) Testing of properties of finite algebras. (82b:03088)

Kegel, Otto H. Examples of highly transitive permutation groups. (82f:20011)

Koubek, Václav See Goralčiková, Alla; et al., (82b:03088)

20A15 Applications of logic to group theory

Rogers, Pat Preservation of saturation and stability in a variety of nilpotent groups. 82k:20003

Ziegler, Martin Algebraisch abgeschlossene Gruppen. (English summary) 82b:20004

secondary classifications:

Baudisch, Andreas The theory of abelian p -groups with the quantifier I is decidable. (82g:03068)

Belegardek, O. V. Unstable group theories. (Russian) (82f:03027)

Dobrica, V. P. Constructivizable abelian groups. (Russian) (82f:03058)

Eklöf, Paul C. (with Mekler, Alan H.) Stationary logic of finitely determinate structures. (82f:03033)

(with Mekler, Alan H.) Infinitary stationary logic and abelian groups. (82j:03042)

Gončarov, S. S. Groups with a finite number of constructivizations. (Russian) (82j:03083)

Huber-Dyson, Verena A reduction of the open sentence problem for finite groups. (82j:03052)

Lampe, William A. (with Myers, Dale) Elementary properties of free extensions. (82j:03033)

Lin, Charlotte Recursively presented abelian groups: effective p -group theory. I. (82j:03054)

Meirembekov, K. A. Remarks on theories with a bounded spectrum. (Russian) (82k:03048)

Mekler, Alan H. See Eklöf, Paul C., (82f:03033) and (82j:03042)

Myers, Dale See Lampe, William A., (82j:03033)

Nadel, Mark E. On a problem of MacDowell and Specker. (82d:03056)

Pozrat, Bruno Sous-groupes définissables d'un groupe stable. (82g:03054)

20A99 None of the above, but in this section

20Bxx Permutation groups

secondary classifications:

Neumann, Peter M. (with Stoy, Gabrielle A.; Thompson, E. C.) ★ Groups and geometry. Vol. I. (82j:20002a)

(with Stoy, Gabrielle A.; Thompson, E. C.) ★ Groups and geometry. Vol. II. (82j:20002b)

Stoy, Gabrielle A. See Neumann, Peter M.; et al., (82j:20002a) and (82j:20002b)

Thompson, E. C. See Neumann, Peter M.; et al., (82j:20002a) and (82j:20002b)

20B05 General theory for finite groups

Bilinski, Stanko Die Invarianten einer diskreten Transformationsgruppe endlicher Ordnung. (Serbo-Croatian summary) 82b:20002

Camina, A. R. Transitivity criteria for finite permutation groups. 82m:20002

Conder, Marston D. E. More on generators for alternating and symmetric groups. 82e:20001

Fomin, A. N. On a conjecture of Sims. (Russian) 82j:20005

Gluck, David Idempotent formula for the Burnside algebra with applications to the p -subgroup simplicial complex. 82e:20005

Ito, Tatsuro (with Kiyota, Masao) Sharp permutation groups. 82k:20004

Johnson, K. W. Transversals, S -rings and centraliser rings of groups. 82f:20010

Kiyota, Masao See Ito, Tatsuro, 82k:20004

Koržik, V. P. A simple formula for the number of orbits of the matrix group of two permutation groups. (Russian) 82j:20006

Ronse, Christian On permutation groups of prime power order. 82d:20007

secondary classifications:

Benda, Miroslav Modeloids. I. (82g:08002)

Bertram, Edward A. (with Wei, Victor K.) Decomposing a permutation into two large cycles: an enumeration. (82c:05009)

Bodnárčuk, Ju. V. (with Kalužnin, L. A.) An algorithm for generation of permutations that preserve a given relation. (Russian) (82f:20002)

Girse, Robert D. The number of conjugacy classes of the alternating group. (82d:10024)

Kalužnin, L. A. See Bodnárčuk, Ju. V., (82f:20002)

Pavlov, A. I. The number of solutions of the equation $x^k = a$ in the symmetric group S_n . (Russian) (82d:10063)

Ronan, Mark A. (with Smith, Stephen D.) 2-local geometries for some sporadic groups. (82c:20033)

Smith, Stephen D. See Ronan, Mark A., (82c:20033)

Wei, Victor K. See Bertram, Edward A., (82c:05009)

20B07 General theory for infinite groups

Cameron, Peter J. Orbits of permutation groups on unordered sets. II. 82k:20005

Kalužnin, L. A. (with Suščanskii, V. I.) Applied problems in the theory of permutation groups. I. (Russian) 82g:20004

(with Suščanskii, V. I.; Ustimenko-Bakumovskii, V. A.) Operation of exponentiation in the theory of permutation groups and its applications. (Russian) 82g:20003

McDonough, T. P. An infinite version of Marggraff's theorem. 82g:20005

Simon, Anne-Marie Groupes symétriques et groupes simples infinis. 82c:20006

Suščanskii, V. I. See Kalužnin, L. A.; et al., 82g:20003 and Kalužnin, L. A., 82g:20004

Ustimenko-Bakumovskii, V. A. See Kalužnin, L. A.; et al., 82g:20003

20B10 Characterization theorems

André, Johannes Eine geometrische Kennzeichnung imprimitiver Frobeniusgruppen. [A geometric characterization of imprimitive Frobenius groups] 82j:20007

Hiramine, Yutaka On some doubly transitive permutation groups in which $\text{soc}(G_n)$ is nonsolvable. 82c:20007a

Doubly transitive groups of even degree whose one-point stabilizer has a normal subgroup isomorphic to $\text{PSL}(3, 2^n)$. 82c:20007b

Knapp, Wolfgang On primitive permutation groups inducing a Frobenius group on a suborbit. II. 82c:20002

Parašćuk, S. D. Calculations in permutation groups that are prescribed by invariant relations. (Russian) 82j:20008

Pettet, Martin R. Nilpotent partition-inducing automorphism groups. 82b:20003

Pogorelov, B. A. Primitive groups of permutations of small degrees. I. (Russian) 82j:20009a

Primitive groups of permutations of small degrees. II. (Russian) 82j:20009b

secondary classifications:

Cannon, John J. Effective procedures for the recognition of primitive groups. (82f:20003)

McDonough, T. P. An infinite version of Marggraff's theorem. (82g:20005)

Siemons, Johannes Normal subgroups of triply transitive permutation groups of degree divisible by 3. (82b:20005)

20B15 Uniprimitive groups

Knapp, Wolfgang An order bound for the point stabilizer of a primitive permutation group. 82b:20004

Numata, Minoru On primitive rank 5 permutation groups with two doubly transitive suborbits of same sizes. 82k:20006

secondary classifications:

Camina, A. R. Transitivity criteria for finite permutation groups. (82m:20002)

20B20 Multiply transitive finite groups

- Bhattacharya, Prabir On the maximality of the projective special linear group in the alternating group. **82j:20010**
- Liebeck, Martin W. Transitive permutation groups on some special prime degrees. II. Towards 4-transitivity. **82d:20008**
- Redmond, D. B. On doubly transitive permutation groups of degree $pq+1$. **82g:20006**
- Shult, Ernest E. Permutation groups with few fixed points. **82j:20011**
- Siemons, Johannes Normal subgroups of triply transitive permutation groups of degree divisible by 3. **82h:20005**

secondary classifications:

- Cannon, John J. Effective procedures for the recognition of primitive groups. **(82f:20003)**
- Hiramine, Yutaka On some doubly transitive permutation groups in which $\text{soc}(G_n)$ is nonsolvable. **(82c:20007a)**
- Doubly transitive groups of even degree whose one-point stabilizer has a normal subgroup isomorphic to $\text{PSL}(3, 2^n)$. **(82c:20007b)**

20B22 Multiply transitive infinite groups

- Kegel, Otto H. Examples of highly transitive permutation groups. **82f:20011**

secondary classifications:

- Schmidt, Roland Untergruppenverbände involutorisch erzeugter Gruppen. **(82g:20053)**

20B25 Finite automorphism groups of algebraic, geometric, or combinatorial structures [See also 05Bxx, 12F10, 20G40, 20H30, 51-XX.]

- Celmins, Uldis A. The Hungarian magic cube puzzle. **82d:20009**
- Čeredničenko, N. I. See Višins'kii, V. A.; et al., **82f:20013**
- Derr, J. B. Stabilizers of isotropic subspaces in classical groups. **82c:20003**
- Hall, Marshall, Jr. Group problems arising from combinatorics. **82a:20005**
- Kantor, William M. Further problems concerning finite geometries and finite groups. **82a:20006**
- Klin, M. H. See Višins'kii, V. A.; et al., **82f:20013**
- Panayiotopoulos, J.-C. Recherche des collections spéciales maximales du groupe $G = G(2) \times G(k)$, k pair. **82h:20006**
- de Paris, Gennaro (with Volzone, Gaetano) Generators of the group of automorphisms of a class of finite incidence structures. (Italian. English summary) **82a:20007**
- Saxl, Jan On points and triples of Steiner triple systems. **82j:20012**
- Singmaster, David ★Notes on Rubik's "magic cube". **82h:20005a**
- ★Notes on Rubik's magic cube. **82h:20005b**
- Talbot, Walter R. Fundamental regions in S_4 for the simple quaternary G_{40} . **82h:20007**
- Turner, Barbara (with Warner, Ken) The structure and geometry of 4×4 pandiagonal matrices. **82f:20012**
- Višins'kii, V. A. (with Klin, M. H.; Čeredničenko, N. I.) Realization of an algorithm for construction of S -rings of cyclic groups of order p^m and its application for solution of the problem of cataloguing cyclic p^m -vertices of graphs. (Russian) **82f:20013**
- Volzone, Gaetano See de Paris, Gennaro, **82a:20007**
- Warner, Ken See Turner, Barbara, **82f:20012**

secondary classifications:

- André, Johannes Eine geometrische Kennzeichnung imprimitiver Frobeniusgruppen. [A geometric characterization of imprimitive Frobenius groups] **(82j:20007)**
- Astie-Vidal, Annie The automorphism group of a matroid. (French summary) **(82f:05024)**
- Babai, László Finite digraphs with given regular automorphism groups. **(82c:05076)**
- Bertani, Laura On some incidence structures. **(82j:51014)**
- Biliotti, Mauro Projective planes with subplanes satisfying prescribed conditions. (Italian. English summary) **(82c:51007)**
- Büttner, Wolfram On translation planes containing $\text{Sz}(q)$ in their translational complement. **(82h:51006)**
- Cameron, Peter J. On graphs with given automorphism group. **(82f:05051)**
- See also Finite geometries and designs, **(82g:05003)**
- Criscuolo, Giovanni (with Kwok, Chung Mo; Mowshowitz, Abbe; Tortora, Roberto) The group and the minimal polynomial of a graph. **(82d:05066)**
- Demetrovics, János (with Hannák, L.; Rónyai, L.) Prime-element algebras with transitive automorphism groups. **(82h:08003)**
- Fiori, Carla See Quattrocchi, Pasquale, **(82f:51009)**
- Fournelle, Thomas A. Finite groups of automorphisms of infinite groups. I. **(82j:20078)**
- Furst, Merrick (with Hopcroft, John; Luks, Eugene) A subexponential algorithm for trivalent graph isomorphism. **(82i:05042)**
- Ganssner, Emden R. Matrix correspondences of plane partitions. **(82f:05009)**
- Gaschütz, Wolfgang (with Schmidt, Roland) Affinitäten endlicher Gruppen. **(82m:20026)**
- Goldschmidt, David M. Automorphisms of trivalent graphs. **(82a:05052)**
- Golomb, Solomon W. Rubik's cube and a model of quark confinement. **(82k:81086)**
- Hannák, L. See Demetrovics, János; et al., **(82h:08003)**
- Hering, Christoph Finite collineation groups of projective planes containing nontrivial perspectivities. **(82i:51005)**
- (Hirschfeld, J. W. P.) See Finite geometries and designs, **(82g:05003)**
- Hopcroft, John See Furst, Merrick; et al., **(82i:05042)**
- (Hughes, D. R.) See Finite geometries and designs, **(82g:05003)**
- Jha, Vikram On the derivability of field transitive quasifields. **(82k:51003)**
- Johnson, Norman Lloyd The translation planes of Ott-Schaeffer. **(82i:51008)**
- Korovina, N. P. Systems of pairs of cyclic type. (Russian) **(82c:05108)**
- Kwok, Chung Mo See Criscuolo, Giovanni; et al., **(82d:05066)**
- Luks, Eugene See Furst, Merrick; et al., **(82i:05042)**

- Mowshowitz, Abbe See Criscuolo, Giovanni; et al., **(82d:05066)**
- Natanzon, S. M. Total number of ovals of the real forms of a complex algebraic curve. (Russian) **(82e:14037)**
- Ollerenshaw, Kathleen The Hungarian magic cube. **(82c:05001)**
- Packel, Edward W. Transitive permutation groups and equipotent voting rules. **(82c:90014)**
- Praeger, Cheryl E. Symmetric graphs and a characterization of the odd graphs. **(82i:05043)**
- Quattrocchi, Gaetano A problem of J. Dénes on certain finite sequences. (Italian. English summary) **(82m:05003a)**
- Relations between major sequences and complete cycles of degree n . (Italian. English summary) **(82m:05003b)**
- Quattrocchi, Pasquale (with Fiori, Carla) A result concerning the existence of certain finite Minkowski-2-structures. **(82f:51009)**
- Rédei, L. To the mathematical theory of "fifteenth-puzzle". **(82c:05058)**
- Ridley, J. N. Automorphism groups of symmetric tournaments. (See **82i:16002**)
- Röhm, Joachim Konstruktionen von Blockplänen durch Frobeniusgruppen. **(82g:05021)**
- Rónyai, L. See Demetrovics, János; et al., **(82h:08003)**
- Rosenthal, John W. Card shuffling. **(82h:10005)**
- Schmidt, Roland See Gaschütz, Wolfgang, **(82m:20026)**
- Tortora, Roberto See Criscuolo, Giovanni; et al., **(82d:05066)**
- Ustimenko-Bakumovskii, V. A. Groups of automorphisms of strongly regular graphs that are invariant with respect to exponentiation of symmetric groups. (Russian) **(82g:05049)**
- Wefelscheid, Heinrich Verallgemeinerte Minkowski-Geometrie. **(82h:51014)**
- Chelwood Gate ★Finite geometries and designs. **(82g:05003)**
- Conference:
- Isle of Thorns, Finite Geometries and Designs ★Finite geometries and designs. **(82g:05003)**
- Finite geometries and designs ★Finite geometries and designs. **(82g:05003)**

20B27 Infinite automorphism groups [See also 12F10.]

secondary classifications:

- Biliotti, Mauro Projective planes with subplanes satisfying prescribed conditions. (Italian. English summary) **(82c:51007)**
- Fleischer, Isidore Abstract characterization for the automorphism group acting on the subalgebra lattice. **(82i:06009)**
- Glass, A. M. W. (with Gurevich, Yuri; Holland, W. Charles; Jambu-Giraudet, Michèle) Elementary theory of automorphism groups of doubly homogeneous chains. **(82i:03047)**
- Gurevich, Yuri See Glass, A. M. W.; et al., **(82i:03047)**
- Holland, W. Charles See Glass, A. M. W.; et al., **(82i:03047)**
- Holton, D. A. (with Watkins, Mark E.) On infinite tournaments with regular automorphism groups. **(82k:05060)**
- Jambu-Giraudet, Michèle See Glass, A. M. W.; et al., **(82i:03047)**
- Rubin, Matyahu On the reconstruction of Boolean algebras from their automorphism groups. **(82c:06026)**
- Schaeffer, Helmut Zur Möbiusgeometrie über Alternativkörpern. **(82j:51010)**
- Skopec, I. M. Orbits of the group of automorphisms of FT-systems. (Russian) **(82j:17012)**
- Šramko, T. S. Normal subgroups in the one-dimensional group of formally analytic transformations over a local ring. (Russian) **(82d:14036)**
- Watkins, Mark E. See Holton, D. A., **(82k:05060)**

20B30 Symmetric groups, general

- Berković, Ja. G. Subgroups of symmetric and alternating groups. (Russian) **82g:20007**
- Kalužnin, L. A. (with Klin, M. H.; Suščans'kii, V. I.) Exponentiation of permutation groups. I. (Russian) **82h:20008**
- Klin, M. H. See Kalužnin, L. A.; et al., **82h:20008**
- Suščans'kii, V. I. See Kalužnin, L. A.; et al., **82h:20008**
- Szalai, M. On the maximal order in S_n and S_n^* . **82c:20008**

secondary classifications:

- Mirman, R. See Soto, M. F., Jr., **(82j:20027a)** and **(82j:20027b)**
- Soto, M. F., Jr. (with Mirman, R.) Objects for the symmetric group. **(82j:20027a)**
- (with Mirman, R.) Addendum: "Objects for the symmetric group". **(82j:20027b)**
- Timmesfeld, Franz G. Groups generated by a conjugacy class of involutions. **(82c:20037)**

20B35 Subgroups of symmetric groups

- Bodnarcuk, Ju. V. (with Suščans'kii, V. I.) Calculation in Sylow 2-subgroups of a symmetric group of degree 2^n . (Russian) **82g:20008**
- Dmitruk, Ju. V. (with Suščans'kii, V. I.) Construction of Sylow 2-subgroups of alternating groups and normalizers of Sylow subgroups in symmetric and alternating groups. (Russian) **82k:20007**
- Faradžev, I. A. See Zaitenko, V. A.; et al., **82g:20012**
- Haimo, Franklin Tepper (with Tretkoff, Marvin D.) Enlarging a free subgroup of a symmetric group freely. **82c:20009**
- See also Semmes, Stephen, **82f:20015**
- Klin, M. H. Examination on the MIR-1 computer of exclusive cases in the problem of maximality of induced symmetric groups. (Russian) **82g:20009**
- See also Zaitenko, V. A.; et al., **82g:20012**
- List, Rudy J. On subgroups of certain alternating groups. (Italian summary) **82k:20008**
- Pogorelov, B. A. Primitive permutation groups of small degree. (Russian) **82j:20010**
- Primitive permutation groups containing a 2^m -cycle. (Russian) **82f:20014**

Seemmes, Stephen (with Haimo, Franklin Tepper) Some complete antinormal subgroups of infinite symmetric groups. **82f:20015**

Sulitsans'kii, V. I. See **Bodnarchuk, Ju. V.**, **82g:20006** and **Dmitruk, Ju. V.**, **82c:20007**

Tretkoff, Marvin D. See **Haimo, Franklin Tepper**, **82c:20009**

Tsykavik, R. I. Pronormal regular subgroups of a finite symmetric group. (Russian) **82g:20011**

Wiegold, James (with Williamson, Alan G.) The factorisation of the alternating and symmetric groups. **82c:20008**

Williamson, Alan G. See **Wiegold, James**, **82c:20008**

Zaitenko, V. A. (with Klin, M. H.; Faradžev, I. A.) Certain problems connected with the representation of permutation groups in the memory of a computer. (Russian) **82g:20012**

secondary classifications:

Berkovik, Ja. G. Subgroups of symmetric and alternating groups. (Russian) **(82g:20007)**

Primenko, E. A. Number of equivalence classes with respect to certain subgroups of a symmetric group. **(82g:05009)**

Prince, A. R. Finite groups with a certain centralizer of an element of order 3. **(82c:20032)**

20B99 None of the above, but in this section

Bercov, Ronald D. (with Sehgal, Surinder K.) Equidistributed Frobenius semilinear permutation groups. **82f:20016**

Kapustka, Emanuel A. propos des objets algébriques abstraits de produits direct et semi-direct de groupes. **82g:20013**

Land, Rudolf Computation of Pólya polynomials of primitive permutation groups. **82c:20010**

Mallot, Cristian Sur l'orientation des G -espaces. (English summary) **82k:20009**

Mosznar, Zsolt Sur les groupes de fonctions. **82b:20006**

Sehgal, Surinder K. See **Bercov, Ronald D.**, **82f:20016**

Seifert, Benedict G. Equivalence et quasi-équivalence pour les extensions fibrées et abstraites de groupes. (English summary) [Equivalence and quasiequivalence for fibred and abstract group extensions] **82m:20003**

Semmler, Ulrike (with Weiss, Richard M.) On Fischer's characterization of Σ_4 and Σ_5 . **82k:20010**

Sulitsans'kii, V. I. (with Vaideman, A. A.) Cortege operations on permutation groups. (Russian. English summary) **82m:20004**

Vaideman, A. A. See **Sulitsans'kii, V. I.**, **82m:20004**

Weiss, Richard M. See **Semmler, Ulrike**, **82k:20010**

secondary classifications:

Celmins, Uldis A. (with Wang, Edward Tzu Hsia) Transitive sets of permutations. **(82b:05005)**

Edelman, Paul H. The Bruhat order of the symmetric group is lexicographically shellable. (Russian. English summary) **82m:20004**

Frasny, Claude Sur quelques classes universelles de relations m -aires. **(82b:04002)**

Gordon, L. M. (with Livingston, Richard) The construction of some automorphic graphs. **(82g:05048)**

Kipiani, A. E. The denumerable homogeneity of sets in abstract spaces. (Russian. Georgian and English summaries) **(82c:04003)**

Leon, Jeffrey S. Finding the order of a permutation group. **(82c:20003)**

Livingston, Richard See **Gordon, L. M.**, **(82g:05048)**

Lipman, Marc J. Fusion free representations of finite groups. **(82c:20018)**

Tamura, Takayuki Permutation groups and ideal extensions. **(82b:20091)**

Wang, Edward Tzu Hsia See **Celmins, Uldis A.**, **(82b:05005)**

20Cxx Representation theory of groups

secondary classifications:

Curtis, Charles W. (with Reiner, Irving) ★Methods of representation theory. Vol. I. **(82i:20001)**

Müller, Wolfgang ★Darstellungstheorie von endlichen Gruppen. (German) [Representation theory of finite groups] **(82f:20001)**

Reiner, Irving See **Curtis, Charles W.**, **(82i:20001)**

20C05 Group rings of finite groups and their modules [See also 16A26.]

Carlson, Jon F. Endo-trivial modules over (p, p) -groups. **82g:20014**
Dimensions of modules and their restrictions over modular group algebras. **82k:20007**

The structure of periodic modules over modular group algebras. **82i:20005**

Gagola, Stephen M., Jr. (with Garrison, S. C.; Pettet, Martin R.) On a vanishing product in the integral group ring. **82i:20006**

Garrison, S. C. See **Gagola, Stephen M., Jr.**, et al., **82i:20006**

Hartley, Brian (with Lichtman, A. I.) Relative higher relation modules. **82j:20013**

Ivory, Lee R. A note on normal complements in mod p envelopes. **82c:20004**

Karpilovsky, G. On the isomorphism problem for integral group rings. **82j:20014**

On group rings of finite metabelian groups. **82j:20015**

Finite groups with isomorphic group algebras. **82d:20010**

Kimmerle, Wolfgang Relative relation modules as generators for integral group rings of finite groups. **82m:20005**

Relation modules and maximal subgroups. **82h:20008**

Lichtman, A. I. See **Hartley, Brian**, **82j:20013**

Merklen, Hector A. Group bases of group rings. **82d:20011**

Motose, Kaoru On the nilpotency index of the radical of a group algebra. II. **82c:20011**
(with Ninomiya, Yasushi) On the commutativity of the radical of the group algebra of a finite group. **82g:20015a**

On problems of Ninomiya and of Tushima. **82i:20007**

Ninomiya, Yasushi See **Motose, Kaoru**, **82g:20015a**

Passman, D. S. The radical of the center of a group algebra. **82g:20016**

(with Smith, P. F.) Units in integral group rings. **82b:20009**

Pettet, Martin R. See **Gagola, Stephen M., Jr.**, et al., **82i:20006**

Roggenkamp, K. W. (with Scott, Leonard L.) Nonsplitting examples for normalized units in integral group rings of metacyclic Frobenius groups. **82b:20009**

Scott, Leonard L. See **Roggenkamp, K. W.**, **82b:20009**

Sekiguchi, Katsusuke The group of units of the integral group ring of a metacyclic group. **82c:20011**

Smith, P. F. See **Passman, D. S.**, **82b:20009**

Spiegel, Eugene Schur indices and the Galois group. **82h:20010**

Tits, Jacques Four presentations of Leech's lattice. (See **82b:20021**)

Valenza, Robert J. Strongly determined subgroups. **82c:20012**

Webb, P. J. The projective extensions of a finite group. **82m:20006**

Yoshida, Tomoyuki On the Hall-Higman and Shult theorems. II. **82g:20017**

secondary classifications:

Cliff, Gerald H. (with Sehgal, Sudarshan K.) Groups which are normal in the unit groups of their group rings. **(82k:20014)**

Jeyakumar, A. Vincent Periodic modules for the group $SL(2, q)$. **(82b:20058)**

Lorenz, Martin Finite normalizing extensions of rings. **(82k:16043)**

Okuyama, Tetsuro On the radical of the center of a group algebra. **(82k:16010)**

Patai, Z. F. The multiplicative group of a group ring. (Ukrainian. Russian summary) **(82i:20021)**

Schaefer, James A. Relation modules for extensions of nilpotent groups. **(82f:20079)**

Sehgal, Sudarshan K. See **Cliff, Gerald H.**, **(82k:20014)**

Taylor, Martin J. Structure galoisienne des anneaux d'entiers des extensions de Kummer. **(82j:12007)**

20C07 Group rings of infinite groups and their modules [See also 16A27.]

Berman, S. D. (with Buzasi, K.) Representations of the infinite dihedral group. (Russian) **82k:20012**

Bieri, Robert (with Strebel, Ralph) A geometric invariant for modules over an abelian group. **82f:20017**

Brown, Kenneth A. (with Lawrence, John W.) Injective hulls of group rings. **82k:20013**
Primitive group rings of soluble groups. **82j:20016**

Buzasi, K. See **Berman, S. D.**, **82k:20012**

Cliff, Gerald H. (with Sehgal, Sudarshan K.) Groups which are normal in the unit groups of their group rings. **82k:20014**

Gupta, C. K. (with Gupta, Narain) Magnus embeddings for groups and group rings. **82j:20017**

Gupta, Narain A problem of R. H. Fox. **82c:20005**

See also **Gupta, C. K.**, **82j:20017**

Harris, Michael The annihilators of p -adic induced modules. **82f:20018**

Hartley, Brian (with Pickel, P. F.) Free subgroups in the unit groups of integral group rings. **82i:20008**

Kublanova, E. M. (with Plotkin, B. I.) Algebra of varieties of representations of groups over an arbitrary commutative ring. (Russian) **82k:20010**

Lawrence, John W. See **Brown, Kenneth A.**, **82k:20013**

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- Arocena, Rodrigo On the relation between isotropic Heisenberg models and a representation of the symmetric group. (Spanish. English summary) (82c:82021)
- Barvinek, Erich Linear differential transformations of the 2nd order as a representation of an abstract model. (82c:34036)
- Biedenharn, L. C. (with Louck, J. D.) Representations of the symmetric group as special cases of the boson polynomials in $U(n)$. (82h:81050)
- Birman, Joseph L. Representation theory, selection rules, and physical processes in crystals. (82m:82041)
- Borekš, I. F. (with Pavlov, V. G.) Uniqueness of decomposition in the linear optimal control problem with a quadratic performance criterion. (82h:49046)
- van den Broek, P. M. (with Dirl, R.) Equivalence of induced representations. (82a:20019)
- Castrigiano, D. P. L. (with Mutze, U.) On the irreducible representations of groups containing a subgroup of finite index. (82j:22006)
- On Euclidean systems of covariance for massless particles. (82i:81066)
- Chen, Jin Quan (with Wang, Fan; Gao, Mei Juan; Yu, Zu Rong) A new method of calculation for molecular shell model. (82h:81140)
- Combe, Ph. (with Sirugue, M.; Rodriguez, R.; Sirugue-Collin, M.) Parafermi fields as projective representation of discrete groups. (See 82h:81004)
- Cracknell, A. P. (with Davies, B. L.) The compilation of tables of reductions of Kronecker products and symmetrised powers of space-group representations. (See 82h:81004)
- Damhus, Ture On the existence of real Clebsch-Gordan coefficients. (82b:22005)
- Davies, B. L. See Cracknell, A. P., (See 82h:81004)
- Dirl, R. Clebsch-Gordan coefficients for corepresentations. I \otimes I. (82i:81054a)
- Clebsch-Gordan coefficients for corepresentations. I \otimes II. (82i:81054b)
- Clebsch-Gordan coefficients for corepresentations. I \otimes III. (82i:81054c)
- Clebsch-Gordan coefficients for corepresentations. II \otimes I. (82i:81054d)
- Clebsch-Gordan coefficients for corepresentations. II \otimes II. (82i:81054e)
- Clebsch-Gordan coefficients for corepresentations. III \otimes III. (82i:81054f)
- On the irreducibility of projective corepresentations—application to double Shubnikov point groups. (82j:20023)
- See also van den Broek, P. M., (82a:20019)
- Dunkl, Charles F. Cube group invariant spherical harmonics and Krawtchouk polynomials. (82j:22011)
- Fischler, Mark Young-tableau methods for Kronecker products of representations of the classical groups. (82j:22003)
- Gao, Mei Juan See Chen, Jin Quan; et al., (82h:81140)
- Kim, Shoon K. A new method of constructing symmetry-adapted linear combinations for a finite group. I. SALCs of equivalent invariant functions. (82h:81147)
- Kunert, H. (with Suffczynski, M.) Vector-coupling coefficients for space groups based on simple cubic lattices. (French summary) (82h:82063)
- Louck, J. D. See Biedenharn, L. C., (82h:81050)
- Michel, Louis (with Mozzyms, J.) Weak equivalence of irreducible representations of little space groups. (82g:22015)
- Mozzyms, Jan See Michel, Louis, (82g:22015)
- Multahova, F. I. Construction of representations of permutation groups on the basis of vector-coupled functions. (Russian. English summary) (82g:81115)

- Muradjan, R. M. Discrete subgroups of three-dimensional rotation groups. (Russian. English summary) (82j:22009)
- Mutze, U. See Castrigiano, D. P. L., (82j:22006)
- Nash, Patrick L. On the substructure of the classical observables x^a , p_a , and J^{ab} . (82j:81029)
- Nikolov, A. V. A generalization of the notion of direct product of groups. (Russian summary) (82b:20046)
- Pavlov, V. G. See Borekš, I. F., (82h:49046)
- Quesne, C. Matrix elements of operators in symmetrical $U(6) \supset U(3) \supset U(2) \supset U(1)$ and $U(6) \supset SU(3) \supset SO(3) \supset SO(2)$ basis. (82j:81061)
- Rodriguez, R. See Combe, Ph.; et al., (See 82h:81004)
- Sirugue, M. See Combe, Ph.; et al., (See 82h:81004)
- Sirugue-Collin, M. See Combe, Ph.; et al., (See 82h:81004)
- Suffczynski, M. See Kunert, H., (82h:82063)
- Wang, Fan See Chen, Jin Quan; et al., (82h:81140)
- Yu, Zu Rong See Chen, Jin Quan; et al., (82h:81140)

20C99 None of the above, but in this section

- McKay, John Graphs, singularities, and finite groups. 82c:20014
- Miller, Robert L. A characterization of weight-preserving automorphisms of group algebras. 82g:20031
- Ostrom, T. G. Finite translation planes and group representation. 82b:20018
- Thévenaz, Jacques ★Représentations linéaires de groupes finis en caractéristique p' . (French) [Linear representations of finite groups with characteristic p'] 82j:20030

secondary classifications:

- tom Dieck, Tammo ★Transformation groups and representation theory. (82c:57025)
- Dress, Andreas W. M. The Cartan map for equivariant higher algebraic K -groups. (82i:18014)
- Grover, John Epimorphisms of units groups. (Arabic summary) (82b:16043)
- Kleisli, Heinrich Coshape-invariant functors and Mackey's induced representation theorem. (82i:18014)
- Moran, Siegfried Covering groups and presentations of finite groups. I. (82g:20061a)
- Rotillon, Denis Deux contre-exemples à une conjecture de R. Stanley sur les anneaux d'invariants intersections complètes. (English summary) (82f:13007)
- Vossi, S. M. Lattices of invariant subspaces of group representations. (82c:06014)
- Wang, Kai Kronecker products of permutations and its applications to group matrices. (82f:15019)

20Dxx Abstract finite groups

secondary classifications:

- Speiser, Andreas ★Die Theorie der Gruppen von endlicher Ordnung. (German) [The theory of groups of finite order] (82j:20003)
- Finite group theory and neighboring areas ★Finite group theory and neighboring areas. (Japanese) (82j:20001)
- Symposium:
Finite Group Theory and Neighboring Areas ★Finite group theory and neighboring areas. (Japanese) (82j:20001)

20D05 Classification of simple and nonsolvable groups

- Aleev, R. Z. Conditions for a component of the centralizer of an involution to be standard. (Russian) 82m:20011
- Alex, Leo J. A characterization of the simple group $L(3,5)$. 82f:20031
- Arad, Zvi (with Herzog, Marcel; Shaki, Ahiezer) On maximal subgroups with a nilpotent subgroup of index 2. 82f:20032
- (with Herzog, Marcel; Shaki, Ahiezer) On finite groups with almost nilpotent maximal subgroups. 82b:20019
- (with Chillag, David; Herzog, Marcel) Classification of finite groups by a maximal subgroup. 82j:20031
- Aschbacher, Michael Thin finite simple groups. 82j:20032
- The uniqueness case for groups of characteristic 2 type. (See 82h:20021)
- Groups of characteristic 2-type. 82c:20031
- The classification of the finite simple groups. 82h:20016
- Finite groups of rank 3. I. 82j:20033
- Weak closure in finite groups of even characteristic. 82j:20034
- Some results on pushing up in finite groups. 82c:20016
- The finite simple groups and their classification. (Russian) 82c:20015
- Assa, Steven B. A characterization of $M(22)$. 82g:20032
- Borovik, A. V. Normalizers of 2-subgroups in finite groups. (Russian) 82j:20035
- Brandl, Rolf Finite groups all of whose elements are of prime power order. (Italian summary) 82m:20012
- Busarkin, V. M. (with Maler, V. R.) Finite groups with nilpotent centralizers of elements of odd order. (Russian) 82c:20017
- Čak'ran, Keropé B. A note on simple groups of order $2^a \cdot 3^b \cdot 5^c \cdot p^f$. 82k:20022a
- Groups containing a three-prime simple group. 82k:20022b
- Finite nonsolvable groups having a maximal subgroup of order $2p$. 82j:20036
- Chillag, David See Arad, Zvi; et al., 82j:20031
- Collins, Michael J. Introduction: a survey of the classification project. (See 82h:20021)
- See also Finite simple groups, 82h:20021
- Egawa, Yoshimi Standard components of type M_{23} . 82c:20028
- Finkelstein, Larry Open standard form problems. 82i:20021
- (with Frohardt, Daniel) Standard 3-components of type $Sp(6,2)$. 82f:20033
- Footo, Richard Finite groups with maximal 2-components of type $L_2(q)$, q odd. 82k:20023
- Finite groups with Sylow 2-subgroups of type $L_2(q)$, $q \equiv 3 \pmod{4}$. 82c:20018

- Frohardt, Daniel From a 3-local plus 3-fusion to the centralizer of an involution. 82f:20034
 See also Finkelstein, Larry, 82f:20033
- Gilman, Robert Odd standard components. 82b:20022
- Gomi, Kenzaku Finite groups with a standard subgroup isomorphic to $\text{PSU}(4, 2)$. 82a:20024
 Remarks on certain standard component problems and the unbalanced group conjecture. 82c:20029
- Gorenstein, Daniel (with Lyons, Richard) Finite groups of characteristic 2 type. (See 82b:20021)
- An outline of the classification of finite simple groups. 82c:20030
- Griess, Robert L., Jr. Odd standard form problems. (See 82b:20021)
- Güloğlu, İsmail Süleyman A characterization of the simple group J_4 . 82g:20033
 A characterization of the simple group ON . 82g:20034
- Guterman, Martin M. A characterization of $F_4(4^*)$ as a group with standard 3-component $B_3(4^*)$. 82a:20025
- Harada, Koichiro Groups with nonconnected Sylow 2-subgroups revisited. 82b:20023
- Harris, Morton E. Finite groups having an involution centralizer with a 2-component of dihedral type. 82b:20020
 On Chevalley groups over fields of odd order, the unbalanced group conjecture and the $B(G)$ -conjecture. 82b:20024
- Herzog, Marcel Character tables, trivial intersections and number of involutions. 82c:20019
 See also Arad, Zvi; et al., 82b:20019; 82f:20032 and 82j:20031
- Hopkins, Mark R. On groups of Ree type. 82b:20026
- Kabanov, V. V. Intersection of Sylow 2-subgroups in finite groups. (Russian) 82b:20017
- Kondrat'ev, A. S. Sylow 2-subgroups of finite nonsolvable groups. (Russian) 82b:20018 (Kostrikin, A. I.) See Aschbacher, Michael, 82c:20015
- Lyons, Richard Signalizer functors in groups of characteristic 2 type. 82b:20021
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- Mahnev, A. A. Finite groups with a sixth-order centralizer. II. (Russian) 82b:20027
 On centralizers of TI-subgroups in finite groups. 82b:20025
 Finite groups with a noninvariant four-core. (Russian) 82b:20028
- Maier, V. R. Finite groups with nilpotent centralizers of elements of order 3. (Russian) 82g:20035
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- Mason, Geoffrey Quasithin groups. (See 82b:20021)
- Quasithin groups. 82b:20026
- Miyamoto, Tzumi Finite groups with a standard subgroup isomorphic to $U_4(2^n)$. 82c:20027
- Newman, Morris (with Shanks, Daniel; Williams, H. C.) Simple groups of square order and an interesting sequence of primes. 82b:20022
- Parrott, David Characterizations of the Fischer groups. I, II, III. 82d:20018
- Podolavov, N. D. Strongly p -embedded subgroups in groups of characteristic 2 type. (Russian) 82g:20036
- Prince, A. R. Finite groups with a certain centralizer of an element of order 3. 82c:20032
- Reifart, Arthur (with Stroth, Gernot) Some simple groups with 2-local 3-rank at most 3. 82d:20019
- Romanovskii, A. V. Simple groups with large Sylow subgroups. (Russian) 82j:20037
- Ronan, Mark A. (with Smith, Stephen D.) 2-local geometries for some sporadic groups. 82c:20033
- Rowley, Peter Characteristic 2-type groups with a strongly closed 2-subgroup of class at most two. 82b:20029
 3-locally central elements in finite groups. 82m:20013
- Sandlöf, Günter Perfect groups of order less than 10^4 . 82d:20020
- Seitz, Gary M. Chevalley groups as standard subgroups. I. 82j:20038a
 Chevalley groups as standard subgroups. II, III. 82j:20038b
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- Shaki, Abiezer See Arad, Zvi; et al., 82b:20019 and 82f:20032
- Shanks, Daniel See Newman, Morris; et al., 82b:20022
- Šidlov, L. I. Finite groups with a normalizer condition. (Russian) 82b:20023
- Smith, Stephen D. The classification of finite groups with large extraspecial 2-subgroups. 82c:20034
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- Solomon, Ronald The $B(G)$ -conjecture and unbalanced groups. (See 82b:20021)
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- Stellmacher, Bernd Über endliche Gruppen mit 2-lokalen maximalen Untergruppen. 82g:20038
- Stroth, Gernot Groups having a self-centralizing elementary abelian subgroup of order 16. 82c:20021
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 See also Reifart, Arthur, 82d:20019
- (Strukov, S. P.) See Aschbacher, Michael, 82c:20015
- Suzuki, Michio Finite groups with a split BN -pair of rank one. 82c:20035
- Syskin, S. A. 2-local subgroups of finite groups. (Russian) 82b:20019
 Some characterization theorems. 82b:20024
- Thomas, Richard M. On the centralizers of elements of order 3 in finite groups. I, II. 82c:20036
- Timmesfeld, Franz G. A condition for the existence of a weakly closed TI-set. 82j:20040
 Groups of $\text{GF}(2)$ -type and related problems. (See 82b:20021)
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- Tran Van Trung Eine Kennzeichnung der endlichen einfachen Gruppe J_4 von Janko durch eine 2-lokale Untergruppe. 82f:20035
- Walter, John H. The B -conjecture: 2-components in finite simple groups. 82b:20025
- Wester, Michael Endliche Gruppen, die eine Involution z besitzen, so daß $F^*(C(z))$ das direkte Produkt einer extraspeziellen 2-Gruppe von kleiner Weite mit einer elementarabelschen 2-Gruppe ist. II, III. 82c:20038
- Williams, H. C. See Newman, Morris; et al., 82b:20022
- Yamada, Hiromichi Standard subgroups isomorphic to $\text{PSU}(5, 2)$. 82b:20030
 Standard subgroups of type $G_2(3)$. 82c:20039
- Zenkov, V. I. Finite groups with given centralizer of a central involution. (Russian) 82b:20031
- Zokayi, Alireza A characterization of the groups ${}^2D_q(q)$, $q=2^n$. 82j:20041
- Durham ★Finite simple groups. II. 82b:20021
 Finite simple groups ★Finite simple groups. II. 82b:20021
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 Finite Simple Groups ★Finite simple groups. II. 82b:20021
- secondary classifications:
- Ambrosiewicz, Elżbieta The property W for regular p -groups and for nilpotent groups of degree 2. (82b:20049)
- Caranov, S. V. Groups with a small number of distinct degrees of irreducible representations. (Russian. English summary) (82c:20016)
- Duan, Xue Fu Works on finite group theory by some Chinese mathematicians. (82b:20036)
- Felt, Walter Some consequences of the classification of finite simple groups. (82c:20019)
- Gordon, L. M. (with Levingston, Richard) The construction of some automorphic graphs. (82g:05048)
- Harada, Koichiro Finite groups of low 2-rank, revisited. (82b:20028)
- Komissar'ik, È. A. Organization of a computer program for enumerating simple groups with a small number of conjugacy classes. (Russian) (82b:20002)
- Levingston, Richard See Gordon, L. M., (82g:05048)
- Monahov, V. S. Product of a solvable and a cyclic group. (Russian) (82j:20051)
- 20D06 Simple groups: alternating and classical groups [See also 20Gxx, 22Exx.]
- Carter, R. W. Centralizers of semisimple elements in the finite classical groups. 82c:20040
- Cooperstein, Bruce N. S - and F -pairs for groups of Lie type in characteristic two. 82g:20039
- Ferguson, Pamela A. On finite groups of type $(2, 4, 4)$. 82b:20029
- Petrov, Nikola T. Finite groups with a maximal dihedral subgroup. (Russian) 82b:20032
 Some maximal subgroups of the group $G_2(F)$. I, II. (Russian) 82b:20033
- Seitz, Gary M. The root groups of a maximal torus. 82b:20022
- Solomon, Ronald The maximal 2-component approach to the $B(G)$ conjecture. 82c:20041
- secondary classifications:
- Beth, Thomas Some remarks on D. R. Hughes' construction of \mathfrak{M}_{12} and its associated designs. (82i:05021)
- Hering, Christoph Finite collineation groups of projective planes containing nontrivial perspectivities. (82i:51005)
- Lusztig, George Some problems in the representation theory of finite Chevalley groups. (82i:20014)
- Seitz, Gary M. Properties of the known simple groups. (82c:20020)
- 20D08 Simple groups: sporadic groups
- Borovik, A. V. 3-local characterization of the Held group. (Russian) 82g:20040
- Butler, Gregory The maximal subgroups of the sporadic simple group of Held. 82c:20022
- Conway, J. H. Monsters and moonshine. 82a:20028
- Fong, Paul Characters arising in the Monster-modular connection. 82a:20029
- Griess, Robert L., Jr. A construction of F_1 as automorphisms of a 196,883-dimensional algebra. 82d:20022
- Herzog, Marcel (with Wright, David) Characterization of a family of simple groups by their character table. II. 82c:20023
- Moori, Jamshid On certain groups associated with the smallest Fischer group. 82g:20041
- Norton, Simon The construction of J_4 . 82a:20030
- Queen, Larissa Modular functions and finite simple groups. 82g:20042
- Sims, Charles C. How to construct a baby monster. (See 82b:20021)
- Syskin, S. A. 3-characterization of the O'Nan-Sims group. (Russian) 82f:20036
- Tits, Jacques Quaternions over $\mathbb{Q}(\sqrt{5})$, Leech's lattice and the sporadic group of Hall-Janko. 82k:20034
- Wright, David See Herzog, Marcel, 82c:20023
- secondary classifications:
- Assa, Steven B. A characterization of $M(22)$. (82g:20032)
- (Collins, Michael J.) See Finite simple groups, (82b:20021)
- Hunt, David C. A computer-based atlas of finite simple groups. (82a:20022)
- Lepowsky, James Euclidean Lie algebras and the modular function j . (82b:17010)
- Logunov, V. I. A note on finite groups that admit coprime automorphisms. (Russian. English summary) (82b:20028)
- Ogg, A. P. Modular functions. (82b:10037)
- Reifart, Arthur (with Stroth, Gernot) Some simple groups with 2-local 3-rank at most 3. (82d:20019)
- Seitz, Gary M. Some standard groups. (82g:20037)
- Stroth, Gernot See Reifart, Arthur, (82d:20019)
- Thompson, John G. A finiteness theorem for subgroups of $\text{PSL}(2, \mathbb{R})$ which are commensurable with $\text{PSL}(2, \mathbb{Z})$. (82b:20067)
- Finite-dimensional representations of free products with an amalgamated subgroup. (82c:20007)

- Tran Van Trung Eine Kennzeichnung der endlichen einfachen Gruppe J_4 von Janko durch eine 2-lokale Untergruppe. (82f:20035)
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20D10 Solvable groups, theory of formations, π -length, ranks, factorable groups, p -groups [See also 20F17.]

- Arad, Zvi (with Chillag, David) π -solubility and nilpotent Hall subgroups. 82h:20026
 Barisovec, P. P. Finite nonabelian p -groups with complemented nonabelian subgroups. (Russian) 82h:20023 Finite nonnilpotent groups in which all the nonabelian subgroups are complemented. (Russian) 82f:20037
 Bechtell, H. Splitting systems for finite solvable groups. 82i:20030
 Berger, T. R. Representation theory and solvable groups: length type problems. 82e:20024
 Blackburn, Norman Über Involutionen in 2-Gruppen. 82k:20035
 Brandl, Rolf A characterization of finite p -soluble groups of p -length one by commutator identities. 82h:20024
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 Brison, Owen J. A criterion for the Hall-closure of Fitting classes. 82m:20016
 On a Fitting class of Hawkes. 82j:20044b
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 Bruhanova, E. G. The relation between 2-length and derived length of a Sylow 2-subgroup of a finite soluble group. (Russian) 82g:20043
 Bryce, R. A. (with Cossey, John) Corrigenda: "Subgroup closed Fitting classes" [Math. Proc. Cambridge Philos. Soc. 83 (1978), no. 2, 195–204; MR 80g:20031]. 82m:20017
 Camina, A. R. A short survey of Fitting classes. 82a:20031
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 Cliff, Gerald H. (with Rhemtulla, Akbar H.) Permuting the elements of a finite solvable group. 82j:20042
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 (with Porta, Marcel) Über Vertauschbarkeit, normale Einbettung und Dominanz bei Fittingklassen endlicher auflösbarer Gruppen. 82j:20043
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 Glauberman, George The revision project and pushing-up. (See 82h:20021)
 Goldschmidt, David M. Pushing-up in finite groups. (See 82h:20021)
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 Harlamova, V. I. (with Reško, K. A.) Characterization of finite groups with given maximal chains. (Russian) 82k:20040
 Hartley, Brian Some theorems of Hall-Higman type for small primes. 82e:20026
 (with Meixner, T.) Finite soluble groups containing an element of prime order whose centralizer is small. 82m:20019
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- Semetkov, L. A. Screens of graduated formations. (Russian) 82h:20026
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 On $\tilde{\gamma}$ -radicals of finite groups. (Russian. English summary) 82m:20022
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secondary classifications:

- Arad, Zvi (with Herzog, Marcel; Shaki, Ahiezer) On finite groups with almost nilpotent maximal subgroups. (82h:20019)
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 Mikaelian, G. S. T -conjugacy of Sylow bases and Hall subgroups in a class of locally finite groups. (Russian. Armenian summary) 82h:20039
 Scarselli, Alessandro Some observations on Fitting classes of locally finite groups. (Italian. English summary) 82f:20053
 Tkačenko, A. N. Burnside and Frobenius theorems in a class of locally normal groups. (Russian) 82h:20040
 On locally normal groups with complementable normal subgroups. (Russian) 82k:20043
 Vosfi, S. M. Two notes on local properties of groups. 82j:20062
 secondary classifications:

- Černikov, N. S. Groups with complemented infinite abelian subgroups. (Russian) (82i:20049)
 Holt, D. F. On the cohomology of locally finite groups. (82k:20064)
 Kegel, Otto H. Examples of highly transitive permutation groups. (82f:20011)

20E26 Residual properties and generalizations

- Wehrfritz, B. A. F. The residual finiteness of some generalised free products. 82j:20063
 secondary classifications:
 Abels, Herbert An example of a finitely presented solvable group. (82b:20047)
 Tomkinson, M. J. A characterization of residually finite periodic FC-groups. (82c:20073)

20E28 Maximal subgroups, minimal subgroups

- Adnan, S. On Frobenius groups. 82f:20054
 Černikov, S. M. Conditions of minimality for subgroups. (Russian) 82i:20044
 Nakamura, Kirio Charakteristische Untergruppen von Quasinormalteilern. 82k:20055
 Narasimha Sastry, N. S. On minimal non-PN-groups. 82a:20038
 secondary classifications:

- Arad, Zvi (with Chillag, David; Herzog, Marcel) Classification of finite groups by a maximal subgroup. (82j:20031)

- Butler, Gregory The maximal subgroups of the sporadic simple group of Held. (82c:20022)

- Chillag, David See Arad, Zvi; et al., (82j:20031)
 Boković, Dragomir Ž. On the existence of maximal subgroups in amalgamated free products. (82b:20042)
 Herzog, Marcel See Arad, Zvi; et al., (82j:20031)
 Kimberle, Wolfgang Relation modules and maximal subgroups. (82b:20006)
 Tuzov, A. N. Generalized solvable groups in which all the serving subgroups of maximal abelian normal subgroups have complements. (Russian) (82g:20066)
 Vaughan-Lee, M. R. (with Wiegold, James) Countable locally nilpotent groups of finite exponent without maximal subgroups. (82f:20066)
 Wiegold, James See Vaughan-Lee, M. R., (82f:20066)

20E32 Simple groups [See also 20D05.]

- Boković, Dragomir Ž. Another example of a finitely presented infinite simple group. 82m:20035
 Nobusawa, Nobuo A remark on conjugacy classes in simple groups. 82k:20056
 secondary classifications:
 Baumslag, Gilbert Problem areas in infinite group theory for finite group theorists. (82c:20063)
 (Merzljakov, Ju. I.) See Solvable and simple infinite groups, (82c:20046)
 Romanovskii, A. V. Simple groups with large Sylow subgroups. (Russian) (82j:20037)
 Simon, Anne-Marie Groupes symétriques et groupes simples infinis. (82c:20006)
 Solvable and simple infinite groups ★Решаемые и простые бесконечные группы. (Russian) [Solvable and simple infinite groups] (82c:20046)

20E34 General structure theorems

- Černikov, N. S. Some factorization theorems for infinite groups. (Russian) 82g:20056
 Kazarin, L. S. On factorizable groups. (Russian) 82j:20064
 Niemennmaa, Markku A note on nonprimary Rédei groups. 82f:20055
 Piccard, Sophie Les groupes P -symétriques. II. 82g:20057
 Polovickii, Ja. D. Groups with finite classes of conjugate infinite abelian subgroups. (Russian) 82j:20065
 Rhemtulla, Akbar H. Finitely generated non-Hopfian groups. 82a:20039
 Voráč, František Subgroups and normal subgroups as systems of ideals. 82c:20060

secondary classifications:

- Beljaev, V. V. Minimal non-FC-groups. (Russian) (82k:20063)
 Miesch, R. J. A metabelian, prime power classification problem. (82j:20047)

20E36 General theorems concerning automorphisms of groups

- Buckley, Joseph (with Wiegold, James) On the number of outer automorphisms of an infinite nilpotent p -group. II. 82i:20045
 Macedońska-Nosalska, Olga On convergent sequences in $\text{Aut}(F)$. (Polish and Russian summaries) 82f:20056
 An infinite Nielsen transformation as a limit of a sequence of finite ones. (Polish and Russian summaries) 82f:20057
 Rusin, David J. Groups admitting nilpotent fixed-point-free automorphism groups. 82j:20066
 Webb, U. H. M. An independence theorem for automorphisms of torsion-free groups. 82k:20057
 Wiegold, James See Buckley, Joseph, 82i:20045

secondary classifications:

- Fournelle, Thomas A. Finite groups of automorphisms of infinite groups. I. (82j:20078)
 McCool, James A characterization of periodic automorphisms of a free group. (82f:20049)
 Neumann, Bernhard Not quite inner automorphisms. (82i:20039)

20E99 None of the above, but in this section

- Byrd, Richard D. (with Lloyd, Justin T.; Mena, Roberto A.; Teller, J. Roger) Extensions of group retractions. 82a:20040
 Lloyd, Justin T. See Byrd, Richard D.; et al., 82a:20040
 Mena, Roberto A. See Byrd, Richard D.; et al., 82a:20040
 Pride, Stephen J. One-relator quotients of free products. 82d:20031
 Strojnowski, Andrzej A note on u.p. groups. 82k:20058
 Teller, J. Roger See Byrd, Richard D.; et al., 82a:20040

secondary classifications:

- Pazderski, Gerhard Prime power groups which are cyclic extensions of elementary abelian groups. (82a:20033)

20Fxx Special aspects of infinite or finite groups

secondary classifications:

- Coldewey, Hans-Dieter See Zieschang, H.; et al., (82h:57002)
 Stillwell, John C. ★Classical topology and combinatorial group theory. (82h:57001)
 Vogt, Elmar See Zieschang, H.; et al., (82h:57002)
 Zieschang, H. (with Vogt, Elmar; Coldewey, Hans-Dieter) ★Surfaces and planar discontinuous groups. (82h:57002)

20F05 Generators, relations, and presentations

- Abels, Herbert An example of a finitely presented solvable group. **82b:20047**
 (Bakhturin, Ju. A.) See Lyndon, Roger C.; et al., **82a:20042**
 Baudisch, Andreas Subgroups of semifree groups. **82k:20059**
 Baumslag, Gilbert (with Cannonito, Frank B.; Miller, Charles F., III) Infinitely generated subgroups of finitely presented groups. II. **82f:20058**
 Bortnik, Tomasz Two-generator two-relator acyclic group. (Russian summary) **82i:20046**
 Brodskii, S. D. Equations over groups and groups with one defining relation. (Russian) **82a:20041**
 Brown, Kenneth A. Relation modules of polycyclic-by-finite groups. **82c:20061**
 Campbell, C. M. (with Robertson, Edmund F.) On 2-generator 2-relation soluble groups. **82h:20041**
 Cannonito, Frank B. See Baumslag, Gilbert; et al., **82f:20058**
 Čebot'ar', A. A. Subgroups of groups with a defining relation that are representable in the form of a direct product. (Russian) **82g:20058**
 Chen, Zhong Mu Full power groups— Z_n -factorizable groups. (Chinese) **82j:20067**
 Havas, George (with Richardson, J. S.; Sterling, Leon S.) The last of the Fibonacci groups. **82c:20068**
 Hermanns, Franz-Josef On certain groups of exponent eight generated by three involutions. **82g:20059**
 Horadam, K. J. A quick test for nonisomorphism of one-relator groups. **82j:20069**
 Howie, James On pairs of 2-complexes and systems of equations over groups. **82g:20060**
 Lennox, John C. (with Wiegold, James) Generators and killers for direct and free products. **82c:20062**
 Lyndon, Roger C. (with Schupp, Paul E.) ★Комбинаторная теория групп. (Russian) [Combinatorial group theory] **82a:20042**
 Equations in groups. **82j:20070**
 Miller, Charles F., III See Baumslag, Gilbert; et al., **82f:20058**
 Moran, Siegfried Covering groups and presentations of finite groups. I. **82g:20061a**
 Covering groups and presentations of finite groups. II. **82g:20061b**
 Nielsen, J. On calculation with noncommutative factors and its application to group theory. **82f:20059**
 Picard, Sophie Diverses façons de caractériser un groupe abstrait dont on connaît une réalisation. **82g:20062**
 Remeslennikov, V. N. Example of a finitely presented pro- p -group, the center of which is not finitely generated. (Russian) **82j:20071**
 Richardson, J. S. See Havas, George; et al., **82c:20068**
 Robertson, Edmund F. A comment on finite nilpotent groups of deficiency zero. **82d:20032**
 See also Campbell, C. M., **82h:20041**
 Schupp, Paul E. See Lyndon, Roger C., **82a:20042**
 Sterling, Leon S. See Havas, George; et al., **82c:20068**
 Strebel, Ralph On one-relator soluble groups. **82e:20041**
 Wiegold, James See Lennox, John C., **82c:20062**

secondary classifications:

- Anašin, V. S. Polynomials over groups. (Russian) (**82f:20051**)
 Conder, Marston D. E. More on generators for alternating and symmetric groups. (**82e:20001**)
 Đoković, Dragomir Ž. Point-sequences on spheres and the Spin groups. (**82f:22001**)
 Another example of a finitely presented infinite simple group. (**82m:20035**)
 Eilers, Erich W. Defining relations for the equiaffine group. (**82j:51003**)
 Relations in hyperreflexion groups. (**82h:20059**)
 Haimo, Franklin Tepper (with Treitkoff, Marvin D.) Enlarging a free subgroup of a symmetric group freely. (**82c:20009**)
 Kirchheimer, Franz (with Wolfart, Jürgen) Explizite Präsentation gewisser Hilbertscher Modulgruppen durch Erzeugende und Relationen. (English summary) (**82c:10034**)
 Laxton, R. R. (with Lockhart, R.) The near-rings hosted by a class of groups. (**82a:16036**)
 Leon, Jeffrey S. On an algorithm for finding a base and a strong generating set for a group given by generating permutations. (**82i:20004**)
 Lockhart, R. See Laxton, R. R., (**82a:16036**)
 Moran, Siegfried On a conjecture of Papakyriakopoulos. (**82h:57005**)
 Sieradski, Allan J. Framed links for Peiffer identities. (**82i:57002**)
 Treitkoff, Marvin D. See Haimo, Franklin Tepper, (**82c:20009**)
 Wolfart, Jürgen See Kirchheimer, Franz, (**82c:10034**)

20F06 Cancellation theory

secondary classifications:

- Lyndon, Roger C. Equations in groups. (**82j:20070**)
 Perraud, Jean Sur la condition de petite simplification $C'(1/6)$ dans un produit libre amalgamé. (English summary) (**82c:20068**)

20F10 Word problems, other decision problems, connections with logic and automata [See also 03D05, 03D40, 06B25, 08A50, 68Dxx, 68F10.]

- Adjan, S. I. Classifications of periodic words and their application in group theory. **82b:20048**
 Ambrosiewicz, Elżbieta The property W for regular p -groups and for nilpotent groups of degree 2. **82b:20049**
 Baumslag, Gilbert Problem areas in infinite group theory for finite group theorists. **82a:20063**
 (with Cannonito, Frank B.; Miller, Charles F., III) Computable algebra and group embeddings. **82e:20042**
 Belegardek, O. V. Decidable fragments of universal theories and existentially closed models. (Russian) **82d:20033**

- Bokut', L. A. Mal'cev's problem and groups with a normal form. **82c:20064**
 Cannonito, Frank B. Two decidable Markov properties over a class of solvable groups. (Russian summary) **82j:20072**
 See also Baumslag, Gilbert; et al., **82e:20042**
 (Collins, Donald J.) See Bokut', L. A., **82c:20064**
 Comerford, Leo P., Jr. Quadratic equations over small cancellation groups. **82f:20060**
 (with Edmunds, Charles C.) Quadratic equations over free groups and free products. **82k:20060**
 Dô Long Vân Problèmes des mots et de conjugaison pour une classe de groupes de présentation finie. (English summary) **82f:20061**
 Edmunds, Charles C. See Comerford, Leo P., Jr., **82f:20060**
 Harlamov, O. G. A finitely presented solvable group with unsolvable word problem. (Russian) **82m:20036**
 Hickin, Kenneth Keller (with Macintyre, Angus) Algebraically closed groups: embeddings and centralizers. **82c:20065**
 Hisamiev, N. G. Criterion for constructivizability of a direct sum of cyclic p -groups. (Russian. Kazakh summary) **82h:20042**
 Horadam, K. J. The word problem and related results for graph product groups. **82c:20043**
 Jabanzi, G. G. The word problem for some groups of the variety N_2A . (Russian) **82m:20037**
 Kukin, G. P. Embedding of recursively presented Lie algebras and groups. (Russian) **82c:20066**
 Lyndon, Roger C. (with Wicks, M. J.) Commutators in free groups. **82i:20047**
 Macintyre, Angus See Hickin, Kenneth Keller, **82c:20065**
 Marksaits, H. Solvability of the word problem for certain groups. (Russian. Lithuanian and English summaries) **82c:20067**
 Miller, Charles F., III The word problem in quotients of a group. **82i:20048**
 See also Baumslag, Gilbert; et al., **82e:20042**
 Pavlov, R. D. The problem of recognizing group properties in restricted alphabets. (Russian) **82a:20043**
 On the problem of recognizing homomorphisms of finitely presented groups. (Russian) **82d:20034**
 Perraud, Jean Sur le problème des mots des quotients de groupes et produits libres. (English summary) **82h:20043**
 Sur la condition de petite simplification $C'(1/6)$ dans un produit libre amalgamé. (English summary) **82c:20068**
 Rips, E. Another characterization of finitely generated groups with a solvable word problem. **82m:20038**
 Romanovskii, N. S. The embedding problem for abelian-by-nilpotent groups. (Russian) **82c:20069**
 Sirvanjan, V. L. The word problem for groups with a recursive set of defining relations of the form $A^n = 1$. (Russian. Armenian summary) **82j:20073**
 Stillwell, John C. The word problem and the isomorphism problem for groups. **82m:20039**
 Tetrušvili, M. R. The conjugacy problem for groups with one defining relation and the complexity of Turing calculations. (Russian) **82h:20050**
 Waack, Stephan ★Tape complexity of word problems. **82m:20040**
 Wicks, M. J. See Lyndon, Roger C., **82i:20047**
 Winkler, Peter M. Computational characterization of abelian groups. **82b:20051**

secondary classifications:

- (Bakhturin, Ju. A.) See Lyndon, Roger C.; et al., (**82a:20042**)
 Baumslag, B. (with Pride, Stephen J.) An extension of the freihitssatz. (**82d:20029**)
 Baumslag, Gilbert (with Cannonito, Frank B.; Miller, Charles F., III) Some recognizable properties of solvable groups. (**82k:20061**)
 Cannonito, Frank B. See Baumslag, Gilbert; et al., (**82f:20058**)
 Cohen, Daniel E. Degree problems for modular machines. (**82c:03066**)
 Eilers, Erich W. Defining relations for the equiaffine group. (**82j:51003**)
 Gončarov, S. S. Groups with a finite number of constructivizations. (Russian) (**82g:03083**)
 Grunewald, Fritz J. (with Segal, Daniel) Some general algorithms. I. Arithmetic groups. (**82d:20048a**)
 (with Segal, Daniel) Some general algorithms. II. Nilpotent groups. (**82d:20048b**)
 Hickin, Kenneth Keller Bounded HNN presentations. (**82j:20059**)
 Horadam, K. J. A quick test for nonisomorphism of one-relator groups. (**82j:20069**)
 Huber-Dyson, Verena A reduction of the open sentence problem for finite groups. (**82j:03052**)
 Lisovik, L. P. Strict sets and finite semigroup coverings. (**82e:20080**)
 Lynch, Nancy A. Straight-line program length as a parameter for complexity measures. (**82e:68009**)
 Lyndon, Roger C. (with Schupp, Paul E.) ★Комбинаторная теория групп. (Russian) [Combinatorial group theory] (**82a:20042**)
 Makanina, T. A. The occurrence problem for the braid group \mathfrak{B}_{n+1} when $n+1 \geq 5$. (Russian) (**82e:20049**)
 McCleary, Stephen H. A solution of the word problem in free normal-valued lattice-ordered groups. (**82b:06026**)
 Miller, Charles F., III See Baumslag, Gilbert; et al., (**82f:20058**)
 Muller, David E. (with Schupp, Paul E.) Context-free languages, groups, the theory of ends, second-order logic, tiling problems, cellular automata, and vector addition systems. (**82m:03051**)
 Nielsen, J. On calculation with noncommutative factors and its application to group theory. (**82f:20059**)
 Pride, Stephen J. See Baumslag, B., (**82d:20029**)
 Rasetti, M. (with Regge, Tullio) Dimer covering and Ising model on lattices homogeneous under the icosahedral group. (**82i:82065**)
 Rassias, George M. Stallings homomorphisms and the simply connectedness problem. (**82i:57001**)
 Regge, Tullio See Rasetti, M., (**82i:82065**)

- Schupp, Paul E. See Lyndon, Roger C., (82a:20042) and Muller, David E., (82m:03051)
 Segal, Daniel See Grunewald, Fritz J., (82d:20048a) and (82d:20048b)
 Semenov, A. L. An interpretation of free algebras in free groups. (Russian) (82b:08011)

20F12 Commutator calculus

- Gaglione, Anthony M. (with Waldinger, Hermann V.) A generalization of the bracketing process applied in the commutator calculus. 82b:20052
 Guralnick, Robert M. On cyclic commutator subgroups. 82d:20035
 Havas, George Commutators in groups expressed as products of powers. 82c:20070
 Mehdi, Jalal Com-compression in groups. 82d:20036
 Quinkert, R. Korrektur und Ergänzung: "Über Schreiersche Gruppenerweiterungen und ihre Kommutatorgruppen" [Acta Sci. Math. (Szeged) 40 (1978), no. 3-4, 327-345; MR 81k:20051]. 82b:20044
 Waldinger, Hermann V. See Gaglione, Anthony M., 82b:20052

secondary classifications:

- Brandl, Rolf A characterization of finite p -soluble groups of p -length one by commutator identities. (82h:20024)
 Lyndon, Roger C. Equations in groups. (82j:20070)
 (with Wicks, M. J.) Commutators in free groups. (82i:20047)
 Wicks, M. J. See Lyndon, Roger C., (82i:20047)

20F14 Derived series, central series, and generalizations

- Grünenfelder, Luzius Lower central series, augmentation quotients and homology of groups. 82a:20044

20F16 Solvable groups, supersolvable groups

- Baumslag, Gilbert (with Cannonito, Frank B.; Miller, Charles F., III) Some recognizable properties of solvable groups. 82k:20061
 Cannonito, Frank B. See Baumslag, Gilbert; et al., 82k:20061
 Huhro, E. I. Nilpotency of solvable groups that admit a splitting automorphism of prime order. (Russian) 82e:20044
 (Merzljakov, Ju. I.) See Solvable and simple infinite groups, 82e:20046
 Miller, Charles F., III See Baumslag, Gilbert; et al., 82k:20061
 Mišenko, B. I. Locally finite groups with complemented infinite nonabelian subgroups. (Russian) 82e:20045
 Novak, G. A. The isomorphism of solvable products of groups. (Russian. English summary) 82f:20062
 Schnabel, Rudolf Eine ringtheoretische Kennzeichnung metabelscher Gruppen. 82f:20063
 Subbotin, I. Ja. Periodic solvable groups with quasicaltizer condition for normal subgroups. (Russian) 82e:20071
 Watanabe, Tetsuro On a characterization of the solvable groups of Galois type. 82a:20045
 Zaicev, D. I. Products of abelian groups. (Russian) 82g:20063
 Solvable and simple infinite groups ★Разрешимые и простые бесконечные группы. (Russian) [Solvable and simple infinite groups] 82e:20046

secondary classifications:

- Abels, Herbert An example of a finitely presented solvable group. (82h:20047)
 Bereznyi, A. E. Discrete groups with subexponential growth of coefficients of the Golod-Safarevič series. (Russian) (82k:20064)
 Budkin, A. I. The axiomatic rank of a quasivariety containing a free solvable group. (Russian) (82f:08012)
 Campbell, C. M. (with Robertson, Edmund F.) On 2-generator 2-relation soluble groups. (82h:20041)
 Černikov, N. S. On the product of almost abelian groups. (Russian) (82e:20058)
 Huhro, E. I. Nilpotency and solvability in varieties of groups with operators. (Russian) (82j:20075)
 Robertson, Edmund F. See Campbell, C. M., (82h:20041)
 Rusin, David J. Groups admitting nilpotent fixed-point-free automorphism groups. (82j:20066)

20F17 Formations of groups [See also 20D10.]

secondary classifications:

- Brison, Owen J. Relevant groups for Fitting classes. (82k:20036)

20F18 Nilpotent groups

- Fournelle, Thomas A. Outer automorphisms of nilpotent groups. 82d:20037
 Giri, R. D. On the laws for nilpotent variety of class-3 groups. 82d:20038
 Grunewald, Fritz J. (with Segal, Daniel) Some general algorithms. II. Nilpotent groups. 82d:20048b
 Hripta, I. I. Centrally elementary nilpotent groups. (Ukrainian. Russian summary) 82j:20074
 Huhro, E. I. Nilpotency and solvability in varieties of groups with operators. (Russian) 82j:20075
 Krasnikov, A. F. Nilpotent subgroups of relatively free groups. (Russian) 82h:20045
 Krstić, Sava On symmetric words in nilpotent groups. 82h:20046
 Lemaire, Claude P -équivalence de groupes nilpotents. [P -equivalence of nilpotent groups] 82j:20076
 Lennox, John C. A note on quasnormal subgroups of finitely generated groups. 82g:20064
 Panferov, B. A. Nilpotent groups with lower central factors of minimal ranks. (Russian) 82j:20077

- Segal, Daniel See Grunewald, Fritz J., 82d:20048b

- Toh, K. H. The separability of double cosets in nilpotent-by-finite groups. 82k:20062

secondary classifications:

- Buckley, Joseph (with Wiegold, James) On the number of outer automorphisms of an infinite nilpotent p -group. II. (82i:20045)
 Budkin, A. I. Quasi-identities of nilpotent groups and groups with one defining relation. (Russian) (82c:20053)
 Corovei, I. The functional equation $f(xy) + f(yx) + f(xy^{-1}) + f(y^{-1}x) = 4f(x)f(y)$ on nilpotent groups. (Romanian. English summary) (82j:39005)
 The functional equation $f(xy) + f(xy^{-1}) = 2f(x)g(y)$ for nilpotent groups. (82j:39007)
 Hodges, Wilfrid Interpreting number theory in nilpotent groups. (82c:03047)
 Huhro, E. I. Nilpotency of solvable groups that admit a splitting automorphism of prime order. (Russian) (82e:20044)
 Robertson, Edmund F. A comment on finite nilpotent groups of deficiency zero. (82d:20032)
 Rogers, Pat Preservation of saturation and stability in a variety of nilpotent groups. (82k:20003)
 Webb, P. J. Minimal relation modules of free nilpotent groups. (82m:20054)
 Wiegold, James See Buckley, Joseph, (82i:20045)

20F19 Generalizations of solvable and nilpotent groups

- Stöhr, R. Freie Produkte torsionsfreier abelscher Gruppen in der Varietät der zentralen Erweiterungen metabelscher Gruppen. 82g:20065
 Tuzov, A. N. Generalized solvable groups in which all the serving subgroups of maximal abelian normal subgroups have complements. (Russian) 82g:20066

secondary classifications:

- Brandl, Rolf A characterization of finite p -soluble groups of p -length one by commutator identities. (82h:20024)

20F22 Other classes of groups defined by subgroup chains

- Stonehewer, Stewart E. Subnormal composition factors of infinite groups. 82e:20072

secondary classifications:

- Černikov, S. M. Infinite generalized Hamiltonian groups. (Russian) (82f:20052)
 Kurdachenko, L. A. Groups satisfying weak minimality and maximality conditions for subnormal subgroups. (Russian) (82h:20035)
 Rhemtulla, Akbar H. Polycyclic right-ordered groups. (82i:06025)
 Sandlöbes, Günter Perfect groups of order less than 10^4 . (82d:20020)
 Semko, N. N. Some forms of nonabelian groups with a prescribed system of invariant infinite abelian subgroups. (Russian) (82h:20038)
 Tögl, Shigeaki Subnormality and ascendancy in groups. (82g:20054)
 Zaicev, D. I. Products of abelian groups. (Russian) (82g:20063)

20F24 FC-groups and their generalizations

- Beljaev, V. V. Minimal non-FC-groups. (Russian) 82k:20063
 Kurdachenko, L. A. Imbeddability of an FC-group into a direct product of finite groups and a torsion-free abelian group. (Russian) 82f:20064
 Tomkinson, M. J. A characterization of residually finite periodic FC-groups. 82e:20073

secondary classifications:

- Merklen, Héctor A. (with Polcino Milies, Francisco César) Group rings over $Z_{(p)}$ with FC unit groups. (82e:20013)
 Polcino Milies, Francisco César See Merklen, Héctor A., (82e:20013)

20F26 Special subgroups

- Busetto, Giorgio A property of embeddings of locally cyclic modular subgroups in groups. (Italian) 82e:20074
 Gavron, P. V. (with Kolotilina, L. Ju.) On subgroups of T -groups. (Russian) 82f:20065
 Kolotilina, L. Ju. See Gavron, P. V., 82f:20065
 Zambelli, Vittoria Quasinormal sensitive and S -quasinormal sensitive finite groups. (Italian. English summary) 82e:20075

secondary classifications:

- Allenby, R. B. J. T. (with Tang, C. Y.; Tang, S. Y.) Notes on Frattini subgroups of generalized free products with cyclic amalgamation. (82h:20041)
 Dunkl, Charles F. Cube group invariant spherical harmonics and Krawtchouk polynomials. (82j:22011)
 Tang, C. Y. See Allenby, R. B. J. T.; et al., (82h:20041)
 Tang, S. Y. See Allenby, R. B. J. T.; et al., (82h:20041)
 Titov, G. N. Groups containing a cyclic subgroup of index p^3 . (Russian) (82a:20034)

20F28 Automorphism groups of groups [See also 20E36.]

- Fournelle, Thomas A. Elementary abelian p -groups as automorphism groups of infinite groups. II. 82e:20047
 Finite groups of automorphisms of infinite groups. I. 82j:20078
 Mutio, N. J. Central automorphisms of a split metacyclic group. 82a:20046

secondary classifications:

- Buckley, Joseph (with Wiegold, James) On the number of outer automorphisms of an

infinite nilpotent p -group. II. (82i:20045)

Dyer, Joan L. (with Grossman, Edna K.) The automorphism groups of the braid groups. (82m:20041)

Fournelle, Thomas A. Outer automorphisms of nilpotent groups. (82d:20037)

Grossman, Edna K. See Dyer, Joan L., (82m:20041)

Macedońska-Nosalska, Olga On convergent sequences in $\text{Aut}(F)$. (Polish and Russian summaries) (82i:20056)

An infinite Nielsen transformation as a limit of a sequence of finite ones. (Polish and Russian summaries) (82i:20057)

McDonald, B. R. $\text{Aut}(\text{GL}_n(R))$ for rings with many units. (82m:20051)

Riehm, C. The automorphism group of a composition of quadratic forms. (82m:10038)

Webb, U. H. M. An independence theorem for automorphisms of torsion-free groups. (82i:20057)

Weisfeiler, Boris Monomorphisms between subgroups of groups of type G_2 . (82j:20088)

Abstract isomorphisms of simple algebraic groups split by quadratic extensions. (82j:20089)

Wiegold, James See Buckley, Joseph, (82i:20045)

20F29 Representations of groups as automorphism groups of algebraic systems

Clausen, Michael Letter place algebras and a characteristic-free approach to the representation theory of the general linear and symmetric groups. II. 82c:20076

20F32 Geometric group theory [See also 05C25, 20Exx, 20Gxx.]

Doro, Stephen (with Wilson, Stephen E.) Rotary maps of type $\{6, 6\}_4$. 82c:20048

Wilkins, David L. Length functions and normal subgroups. 82c:20077

Wilson, Stephen E. See Doro, Stephen, 82c:20048

secondary classifications:

Bachmann, Friedrich Rigidity in the geometry of involutory elements of a group. (82d:51005)

Blass, Andreas (with Harary, Frank; Miller, Zevi) Which trees are link graphs? (82b:05016)

Fichtner, Konrad Über geometrische Äquivalenz von Symmetrie-Gruppoiden. (82b:20078)

Harary, Frank See Blass, Andreas; et al., (82b:05016)

Kierlein, Joseph B. (with Starling, A. Gregory) Hamiltonian groups are color-graph-Hamiltonian. (82c:05097)

Miller, Zevi See Blass, Andreas; et al., (82b:05016)

Sachs, Horst Über einige graphentheoretisch-kombinatorische Problemkreise. (82d:05060)

Shee, S. C. On algebraic graphs. (82g:05081)

Sosnovskii, Ju. V. Isomorphisms of symplectic groups over division rings of characteristic not equal to 2. (Russian) (82m:20052)

Starling, A. Gregory See Kierlein, Joseph B., (82c:05097)

Talbot, Walter R. Fundamental regions in S_4 for the simple quaternary G_{40} . (82b:20007)

Vince, Andrew Locally homogeneous graphs from groups. (82k:05061)

20F34 Fundamental groups and their automorphisms [See also 57M05, 57Sxx.]

Dicks, Warren ★Groups, trees and projective modules. 82j:20079

20F36 Braid groups

Dyer, Joan L. (with Grossman, Edna K.) The automorphism groups of the braid groups. 82m:20041

Grossman, Edna K. See Dyer, Joan L., 82m:20041

Lin, V. Ja. Artin braids and related groups and spaces. (Russian) 82h:20047

Makanina, T. A. The occurrence problem for the braid group \mathcal{B}_{n+1} when $n+1 \geq 5$. (Russian) 82c:20049

Moran, Siegfried Matrix representation for the braid group B_4 . 82b:20053

secondary classifications:

Gorjunov, V. V. Cohomology of braid groups of series C and D . (Russian) (82k:20085)

Matveev, S. V. See Zil'berg, A. L., (82k:57004)

Moran, Siegfried The Alexander matrix of a knot. (82m:57001)

Zil'berg, A. L. (with Matveev, S. V.) Relations in the homotopy group of a handlebody and the ribbon braid group. (Russian) (82k:57004)

20F38 Other groups related to topology or analysis

secondary classifications:

Čmutov, S. V. Monodromy groups of singularities of functions of two variables. (Russian) (82i:32022)

Gorjunov, V. V. Geometry of the bifurcation diagrams of simple projections onto a line. (Russian) (82i:58017)

Johnson, Dennis Conjugacy relations in subgroups of the mapping class group and a group-theoretic description of the Rochlin invariant. (82a:57007)

An abelian quotient of the mapping class group \mathcal{S}_g . (82a:57008)

Kawauchi, Akio (with Kojima, Sadayoshi) Algebraic classification of linking pairings on 3-manifolds. (82b:57007)

Kojima, Sadayoshi See Kawauchi, Akio, (82b:57007)

Novák, Josef On a free convergence group. (82b:20039)

20F40 Associated Lie structures

Sjogren, J. A. Dimension and lower central subgroups. 82j:20080

Wiegold, James A problem in Lie rings. 82a:20047

20F45 Engel conditions

Gupta, Narain (with Levin, Frank) On soluble Engel groups and Lie algebras. 82c:20078

Kappe, Luise-Charlotte Right and left Engel elements in metabelian groups. 82g:20067

Levin, Frank See Gupta, Narain, 82c:20078

20F50 Periodic groups

Černikov, N. S. Groups with complemented infinite abelian subgroups. (Russian) 82i:20049

Factorizations of locally finite groups. (Russian) 82h:20048

Grunewald, Fritz J. (with Havas, George; Mennicke, J. L.; Newman, M. F.) Groups of exponent eight. 82d:20039a

(with Mennicke, J. L.) Finiteness proofs for groups of exponent 8. 82d:20039b

Havas, George See Grunewald, Fritz J.; et al., 82d:20039a

Mennicke, J. L. See Grunewald, Fritz J.; et al., 82d:20039

Newman, M. F. Problems. 82a:20048

See also Grunewald, Fritz J.; et al., 82d:20039a

Vaughan-Lee, M. R. (with Wiegold, James) Countable locally nilpotent groups of finite exponent without maximal subgroups. 82f:20066

Wiegold, James See Vaughan-Lee, M. R., 82f:20066

secondary classifications:

Alford, W. A. (with Pietsch, Bodo) An application of the nilpotent quotient program. (82d:20001)

Havas, George (with Newman, M. F.) Application of computers to questions like those of Burnside. (82d:20002)

Hermanns, Franz-Josef On certain groups of exponent eight generated by three involutions. (82g:20059)

Kim, Ann Chi (with Neumann, Bernhard; Rhemtulla, Akbar H.) More Fibonacci varieties. (82d:08009)

Neumann, Bernhard See Kim, Ann Chi; et al., (82d:08009)

Newman, M. F. See Havas, George, (82d:20002)

Pietsch, Bodo See Alford, W. A., (82d:20001)

Rhemtulla, Akbar H. See Kim, Ann Chi; et al., (82d:08009)

20F60 Ordered groups [See mainly 06F15.]

Dimitrov, Z. I. Rigidly directed groups. (Russian) 82b:20054

20F99 None of the above, but in this section

Ambrosiewicz, Jan On the decomposition of an element in a group into a product of elements of the same order. 82f:20067

Bachmann, Friedrich (with Knüppel, Frieder) Starrheit in der Geometrie involutorischer Gruppenelemente. 82b:20055

Behrendt, Gerhard (with Neumann, Peter M.) On the number of normal subgroups of an infinite group. 82j:20081

Bereznyi, A. E. Discrete groups with subexponential growth of coefficients of the Golod-Safarevič series. (Russian) 82k:20064

Ferrero, Giovanni (with Gallina, Giordano) Steiner functions with many multipliers. (Italian. English summary) 82k:20065

Gallina, Giordano On the existence of certain Steiner functions. (Italian. English summary) 82k:20066

See also Ferrero, Giovanni, 82k:20065

Knüppel, Frieder See Bachmann, Friedrich, 82b:20055

Longobardi, Patrizia (with Maj, Mercedes) A Chapman-Scorza theorem. (Italian) 82k:20067

Maj, Mercedes See Longobardi, Patrizia, 82k:20067

Marat, V. S. Groups with a dense system of finite invariant jumps. (Russian) 82k:20068

Martić, Branislav Group manifolds. II. (Serbo-Croatian. English summary) 82f:20069a

Group manifolds. III, IV, V, VI. (Serbo-Croatian. English summary) 82f:20069b

Neumann, Peter M. See Behrendt, Gerhard, 82j:20081

Subbotin, I. Ja. Infinite groups in which every subgroup of the commutator is invariant. (Russian) 82b:20049

Suĭkov, N. M. Automorphically factorizable groups. (Russian) 82b:20056

Sun, Hugo S. On groups whose squares form a group. 82m:20042

Tits, Jacques Définition par générateurs et relations de groupes avec BN -paires. (English summary) [Definition by generators and relations of groups with BN -pairs] 82k:20069

Tyrer Jones, J. Mary On isomorphisms of direct powers. 82f:20068

Wilker, John B. Generalized symmetry. 82g:20068

secondary classifications:

Cherubini, Alessandra (with Variaco, Ada) Semigroups whose proper subsemigroups are quasicommutative. (82i:20072)

Graham, Colin C. (with Ramsey, L. Thomas) Sidon sets with extremal Sidon constants. (82j:43006)

Ramsey, L. Thomas See Graham, Colin C., (82j:43006)

Rhemtulla, Akbar H. Finitely generated non-Hopfian groups. (82a:20039)

Stefanescu, Mirela Multiplications infra-distributives sur un groupe. (82c:16038)

Variaco, Ada See Cherubini, Alessandra, (82i:20072)

20Gxx Linear algebraic groups (classical groups) (For arithmetic theory, see 10C30, 10E45; for geometric theory, see 14Lxx, 22Exx; for other methods in representation theory, see 22E45, 22E46, 22E47, 22E50, 22E55.)

Dieudonné, Jean A. ★On the automorphisms of the classical groups. 82c:20079

(Hua, Luo Geng) See Dieudonné, Jean A., 82c:20079

Humphreys, James E. ★Линейные алгебраические группы. (Russian) [Linear algebraic groups] 82c:20080

Merrifield, Ju. I. Isomorphism theory for classical groups from 1976 to 1980. (Russian) 82c:20080

(Zaleskii, A. E.) See Humphreys, James E., 82c:20080

secondary classifications:

Hochschild, Gerhard P. ★Basic theory of algebraic groups and Lie algebras. (82i:20002) Algebraic groups ★Lie algebras, algebraic groups and related topics. (Japanese) (82a:17001)

Lie algebras, algebraic groups and related topics ★Lie algebras, algebraic groups and related topics. (Japanese) (82a:17001)

Symposium:

Lie Algebras, Algebraic Groups and Related Topics ★Lie algebras, algebraic groups and related topics. (Japanese) (82a:17001)

Topics Related with Prehomogeneous Vector Spaces ★Topics related with prehomogeneous vector spaces. (Japanese) (82g:32003)

Topics related with prehomogeneous vector spaces ★Topics related with prehomogeneous vector spaces. (Japanese) (82g:32003)

20G05 Representation theory

Andersen, Henning Haahr On the structure of Weyl modules. 82c:20051

Carter, R. W. Complex representation theory of finite groups of Lie type. (See 82c:20021)

Cooperstein, Bruce N. Nearly maximal representations for the special linear group. 82c:20050

Curtis, Charles W. Problems concerning characters of finite groups of Lie type. 82c:20043

Dipper, Richard Vertices of irreducible representations of finite Chevalley groups in the describing characteristic. 82g:20069

Haboush, W. J. Central differential operators on split semisimple groups over fields of positive characteristic. 82c:20049

Humphreys, James E. Modular representations of finite groups of Lie type. (See 82c:20021)

Jantzen, Jens Carsten Weyl modules for groups of Lie type. (See 82h:20021)

Darstellungen halbeinfacher Gruppen und ihrer Frobenius-Kerne. 82h:20057

Zur Reduktion modulo p der Charaktere von Deligne und Lusztig. 82m:20045

Jeyakumar, A. Vincent Periodic modules for the group $SL(2, q)$. 82h:20058

Lusztig, George (with Spaltenstein, N.) Induced unipotent classes. 82g:20070

Hecke algebras and Jantzen's generic decomposition patterns. 82h:20059

On the unipotent characters of the exceptional groups over finite fields. 82c:20081

Mizuno, Kenzo The conjugate classes of unipotent elements of the Chevalley groups E_7 and F_4 . 82m:20046

Rothman, Sheldon (with Strassberg, Helen) The algebraic von Neumann kernel and linear algebraic groups. 82d:20040

Sawada, Hideki Some infinite-dimensional indecomposable modules of Chevalley groups. 82j:20082

Scott, Leonard L. Representations of algebraic groups. 82m:20047

Representations in characteristic p . 82c:20052

Spaltenstein, N. See Lusztig, George. 82g:20070

Srinivasan, Bama Characters of finite groups of Lie type. II. 82m:20044

The blocks of the general linear group $GL(n, q)$. 82g:20071

Stanley, Richard P. Weyl groups, the hard Lefschetz theorem, and the Sperner property. 82j:20083

Strassberg, Helen See Rothman, Sheldon. 82d:20040

Suprunenko, I. D. Subgroups of $GL(n, p^m)$ containing $SL(2, p)$ in an irreducible representation of degree n . I. (Russian. English summary) 82c:20053a

Subgroups of $GL(n, p^m)$ containing $SL(2, p)$ in an irreducible representation of degree n . II. (Russian. English summary) 82c:20053b

Williams, Julian S. The prime graph components of finite groups. 82i:20050

Yoshida, Hiroyuki Weil's representations of the symplectic groups over finite fields. 82j:20084

secondary classifications:

Andersen, Henning Haahr Representations of algebraic groups via cohomology of line bundles. (See 82i:00012)

Beilinson, Alexandre (with Bernstein, I. N.) Localisation de g -modules. (English summary) (82k:14015)

Bernstein, I. N. See Beilinson, Alexandre. (82k:14015)

Borho, Walter (with MacPherson, Robert) Représentations des groupes de Weyl et homologie d'intersection pour les variétés nilpotentes. (English summary) (82f:14002)

Brion, Michel Représentations irréductibles des groupes de Lie simples dont l'algèbre des U -invariants est régulière. (English summary) [Irreducible representations of simple Lie groups whose algebra of U -invariants is regular] (82m:22014)

Clozel, Laurent Changement de base pour les représentations tempérées des groupes réductifs réels. (English summary) (82h:10034)

Gow, Roderick On the Schur indices of characters of finite classical groups. (82i:20012)

Green, James A. Polynomial representations of GL_n . (82i:20019)

Hesselink, Wim H. Characters of the nullcone. (82c:17004)

Hilber, Howard L. Schubert calculus of a Coxeter group. (82m:14031)

Jakobsen, Hans Plesner The last possible place of unitarity for certain highest weight modules. (82k:17006)

Kemf, George R. Representations of algebraic groups in prime characteristics. (82k:14031)

Kimelfeld, B. N. See Vinberg, É. A., (82c:32042)

Kraft, Hanspeter (with Procesi, Claudio) Minimal singularities in GL_n . (82c:14007)

MacPherson, Robert See Borho, Walter. (82f:14002)

Petrie, Ted Transformation groups and representation theory. (82a:20024)

Pommerening, Klaus Invarianten unipotenter Gruppen. (82i:14029)

Procesi, Claudio See Kraft, Hanspeter. (82c:14007)

Raghunathan, M. S. Principal bundles on affine space. (82g:14021)

Speh, Birgit Indecomposable representations of semisimple Lie groups. (82j:22012)

Stanton, Dennis Three addition theorems for some q -Krawtchouk polynomials. (82g:33035)

Vinberg, É. A. (with Kimelfeld, B. N.) Homogeneous domains on flag manifolds and spherical subsets of semisimple Lie groups. (Russian) (82c:32042)

Wagner, Ascher Invariants of groups generated by reflections or transvections. (82j:20087)

20G10 Cohomology theory

Aguadé i Bover, Jaume The cohomology of the GL_2 of a finite field. 82b:20060

Alperin, Roger C. Homology of $SL_2(\mathbb{Z}/p\mathbb{Z})$. 82f:20070

Avrunin, George S. Generic cohomology for twisted groups. 82m:20048

Morita, Jun Tits' systems in Chevalley groups over Laurent polynomial rings. 82a:20050

Moss, Kenneth N. Homology of $SL(n, \mathbb{Z}/p\mathbb{Z})$. 82b:20061

O'Halloran, Joyce Weyl modules and the cohomology of Chevalley groups. 82j:20085

Sullivan, John Brendan Frobenius operations on Hochschild cohomology. 82c:20054

secondary classifications:

Besson, G. Groupe de Lie p -adique, immeuble et cohomologie. [p -adic Lie group, building and cohomology] (82k:22010)

Friedlander, Eric M. (with Parshall, Brian) Étale cohomology of reductive groups. (82m:14008)

van der Kallen, Wilberd Homology stability for linear groups. (82c:18011)

Parshall, Brian See Friedlander, Eric M., (82m:14008)

Scheringer, D. Präsentation der $GL_n(D)$ und Dieudonné-Determinante. (See 82b:16014)

Seidenberg, A. On the functions invariant under the action of an algebraic group on an algebraic variety. (Italian summary) (82c:14059)

Sullivan, John Brendan The second Lie algebra cohomology group and Weyl modules. (82g:17013)

20G15 Linear algebraic groups over arbitrary fields

Barry, M. J. J. On commutators in Chevalley groups. 82j:20086

Grigor'ev, D. Ju. An analogue of the Bruhat decomposition for the closure of the cone of a classical Chevalley group series. (Russian) 82f:20071

King, Oliver On some maximal subgroups of the classical groups. 82c:20055

Men'sikov, S. A. Some subgroups of the general linear groups. (Russian) 82k:20070

Patera, J. (with Winternitz, P.; Zassenhaus, Hans) On the maximal abelian subgroups of the linear classical algebraic groups. 82a:20051

Pierce, Stephen Maximal subgroups of the orthogonal group. 82m:20049

Ren, Hong Shuo Automorphisms of $SL_2(k)$ over a class of skew fields. (Chinese) 82j:20071

Rosenberg, Alexandre Homomorphismes "abstraits" de groupes algébriques et de groupes de Lie. (English summary) 82b:20062

Rosenlicht, Maxwell Initial results in the theory of linear algebraic groups. 82c:20072

Tomanov, G. M. The Frattini subgroup and normal subgroups of algebraic groups. (Russian. English summary) 82h:20051

Vavilov, N. A. Bruhat decomposition for subgroups containing a group of diagonal matrices. (Russian) 82g:20072

Voigt, Detlef Groupes algébriques infinitésimaux résolubles et leurs représentations linéaires irréductibles. 82b:20063

Wagner, Ascher Invariants of groups generated by reflections or transvections. 82j:20087

Wall, G. E. Conjugacy classes in projective and special linear groups. 82d:20041

Wang, S. P. A note on free subgroups in linear groups. 82i:20051

Weisfeiler, Boris Monomorphisms between subgroups of groups of type G_2 . 82j:20088

Abstract isomorphisms of simple algebraic groups split by quadratic extensions. 82j:20089

Winternitz, P. See Patera, J.; et al., 82a:20051

Zassenhaus, Hans See Patera, J.; et al., 82a:20051

secondary classifications:

Adamović, O. M. Equidimensional representations of simple algebraic groups. (Russian) (82h:14033)

Černousov, V. I. On the rationality of spinor varieties over the rational number field. (Russian. English summary) (82m:14009)

Dobbin, J. Gregory Factorization of a matrix group. (82b:15006)

Draxl, Peter Corps gauches à involution de deuxième espèce. (82g:12013)

Faltings, Gerd Formale Geometrie und homogene Räume. (82m:14006)

James, D. G. (with Weisfeiler, Boris) On the geometry of unitary groups. (82i:10039)

King, Oliver Maximal subgroups of the classical groups associated with nonisotropic subspaces of a vector space. (82m:10041)

Merrifield, Ju. I. ★Рациональные группы. (Russian) [Rational groups] (82m:20001)

Nakao, Zensho Polynomial group laws. (82h:14030a)

Polynomial group laws. II. (82h:14030b)

Schneider, Hans-Jürgen Zerlegbare Untergruppen affiner Gruppen. (82h:14029)

Stodowy, Peter ★Simple singularities and simple algebraic groups. (82g:14037)

Springer, T. A. Geometric questions arising in the study of unipotent elements. (82f:14049)

Vust, Thierry Foncteurs polynomiaux et théorie des invariants. (82b:15020)

(Wang, Yang Xian) See Zhang, Hai Quan, (82h:10036)

Weisfeiler, Boris See James, D. G., (82e:10039)

Zhang, Hai Quan Comment on: "A new definition of spinor norm" [Acta Math. Sinica 16 (1966), 411–424; translated as Chinese Math.—Acta 8 (1966), 433–447; MR 34 #4370] by Y. H. Wang. (Chinese) (82h:10036)

20G20 Linear algebraic groups over the reals, the complexes, the quaternions

Đoković, Dragomir Ž. Closures of conjugacy classes in classical real linear Lie groups. (82h:20052)

Jørgensen, Troels Commutators in $SL(2, \mathbb{C})$. (82h:20053)

Kac, Victor G. Simple Lie groups and the Legendre symbol. (82f:20072)

Kiriljuk, O. A. (with Rud'ko, V. P.) On finite irreducible solvable subgroups of group $GL(p, \mathbb{Z})$. (Russian. English summary) (82a:20052)

Rud'ko, V. P. See Kiriljuk, O. A., (82a:20052)

Thompson, John G. Invariants of finite groups. (82d:20042)

secondary classifications:

Hesslink, Wim H. Nilpotency in classical groups over a field of characteristic 2. (82d:14030)

Kimura, Tatsuo Theory of prehomogeneous vector spaces. (Japanese) (82k:14049)

Rothman, Sheldon (with Strassberg, Helen) The algebraic von Neumann kernel and linear algebraic groups. (82d:20040)

Špiž, G. B. Classification of irreducible locally transitive linear Lie groups. (Russian) (82j:22007)

Strassberg, Helen See Rothman, Sheldon, (82d:20040)

20G25 Linear algebraic groups over local fields and their integers

Asou, Yasuhiro Some notes on algebraic groups with affine root structures. I. (82c:20082)

Ishibashi, Hiroyuki Simple coefficient extensions of symplectic groups. (82f:20073)

Thompson, John G. Fixed point free involutions and finite projective planes. (See 82h:20021)

Tits, Jacques Buildings and Bruhat geometries. (See 82h:20021)

secondary classifications:

Ishibashi, Hiroyuki Generators of orthogonal groups over valuation rings. (82f:10025)

Mimura, Yoshio On orthogonal groups over the integers of a nonbinary local field. (82k:10022)

Northcott, D. G. ★Affine sets and affine groups. (82c:14002)

20G30 Linear algebraic groups over global fields and their integers

Appelgate, Harry (with Onishi, Hironori) Continued fractions and the conjugacy problem in $SL_2(\mathbb{Z})$. (82c:20052)

Bondarenko, A. A. See Platonov, V. P.; et al., (82k:20074)

Borho, Walter Zum Induzieren unipotenter Klassen. [On the induction of unipotent classes] (82j:20090)

Lai, Heng Lung Index of a simple adjoint group. (82c:20073)

Lai, K. F. Tamagawa number of reductive algebraic groups. (82d:20043)

Onishi, Hironori See Appelgate, Harry, (82c:20052)

Platonov, V. P. (with Bondarenko, A. A.; Rapinčuk, A. S.) Numbers and groups of classes of algebraic groups. (Russian) (82k:20074)

Rapinčuk, A. S. Platonov's conjecture on genus in arithmetic groups. (Russian. English summary) (82c:20053)

See also Platonov, V. P.; et al., (82k:20074)

Sosnovskii, Ju. V. On a general isomorphism theory for linear groups. (Russian) (82f:20074)

secondary classifications:

Borel, A. Commensurability classes and volumes of hyperbolic 3-manifolds. (82j:22008)

Chowla, Sarvadaman (with Cowles, John R.; Cowles, M.) On the number of conjugacy classes in $SL(2, \mathbb{Z})$. (82c:10035)

Cowles, John R. See Chowla, Sarvadaman; et al., (82c:10035)

Cowles, M. See Chowla, Sarvadaman; et al., (82c:10035)

Hirai, Takeshi On Richardson classes of unipotent elements in semisimple algebraic groups. (82k:17007)

Hurrelbrink, Jürgen On $K_2(o)$ and presentations of $SL_d(o)$ in the real quadratic case. (82h:12008)

Hwang, Chii Ruey Laplace's method revisited: weak convergence of probability measures. (82c:60007)

Licht, Bernhard On the group SL_2 over orders of arithmetic type. (82k:10034)

Mendoza, Eduardo R. ★Cohomology of PGL_2 over imaginary quadratic integers. (82g:22012)

Pauer, Franz Normale Einbettungen von G/U . [Normal embeddings of G/U] (82k:14050)

Queen, Larissa Modular functions and finite simple groups. (82g:20042)

Serežkin, V. N. Subgroups of symplectic groups that are rich in transvections. (Russian. English summary) (82j:10043)

Sjerve, Denis Canonical forms for torsion matrices. (82k:15014)

Tuler, Randy Subgroups of SL_2 generated by elementary matrices. (82k:10026)

20G35 Linear algebraic groups over adèles and other rings and schemes

Dybko, E. V. See Vavilov, N. A., (82h:20054)

Golubčik, I. Z. (with Mihalev, A. V.) Generalized group identities in classical groups. (Russian) (82j:20091)

Mihalev, A. V. See Golubčik, I. Z., (82j:20091)

Petrov, E. E. Classes of conjugate elements of the group $SL(2, \mathbb{Z}/p^h\mathbb{Z})$, $p \neq 2$. (Russian) (82b:20064)

Plotkin, E. B. Parabolic subgroups in ${}^3D_4(R)$. (Russian) (82h:20054)

Scheringer, D. Präsentation der $GL_n(D)$ und Dieudonné-Determinante. (See 82h:16014)

Schulze-Pillot, Rainer Struktur von $GL_n(D)$. (See 82h:16014)

Vavilov, N. A. (with Dybko, E. V.) Subgroups of the general symplectic group

containing the group of diagonal matrices. (Russian) (82h:20054)
On subgroups of the general linear group over a semilocal ring containing a group of diagonal matrices. (Russian. English summary) (82g:20073)

secondary classifications:

Gupta, Surender K. (with Murthy, M. Pavaman) ★Suslin's work on linear groups over polynomial rings and Serre problem. (82j:13009)

Kazhdan, David An introduction to Drinfel'd's "Shtuka". (82f:12018)

Murthy, M. Pavaman See Gupta, Surender K., (82j:13009)

Rapinčuk, A. S. Platonov's conjecture on genus in arithmetic groups. (Russian. English summary) (82c:20053)

Rehmann, U. Kommutatoren in $GL_n(D)$. (See 82h:16014)

Vorst, Ton The general linear group of polynomial rings over regular rings. (82c:13008)

20G40 Linear algebraic groups over finite fields

Barševčev, P. P. Finite nonsolvable groups in which the subgroups of nonprime index are either nilpotent or Šmidt groups. (Russian) (82k:20075)

Čak'ran, Kerop B. Generators for the simple subgroups of $G_2(4)$. (82c:20055)

Cooperstein, Bruce N. Geometry of long root subgroups in groups of Lie type. (82c:20056)
Maximal subgroups of $G_2(2^n)$. (82h:20055)

Deriziotis, D. I. The Brauer complex of a Chevalley group. (82f:20075)

Digne, François (with Michel, Jean) Descente de Shintani des caractères de

Deligne-Lusztig. (English summary) (82a:20053)
(with Michel, Jean) Descente de Shintani des caractères d'un groupe de Chevalley fini. (English summary) (82h:20065)

İvanjuta, I. D. Sylow p -subgroups of the group $GL(q)$. (Russian) (82h:20056)

Kazhdan, David (with Lusztig, George) A topological approach to Springer's representations. (82f:20076)

Lusztig, George See Kazhdan, David, (82f:20076)

Macdonald, I. G. Numbers of conjugacy classes in some finite classical groups. (82j:20092)

Michel, Jean See Digne, François, (82a:20053 and 82h:20065)

Suprunenko, I. D. Finite irreducible groups of degree 4 over fields of characteristic 3 and 5. (Russian. English summary) (82h:20057)

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Chastkofsky, Leonard Characters of projective indecomposable modules for finite

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groups. (82g:20023)

Kolbaev, V. A. A description of D -complete subgroups of the general linear group over a field of three elements. (Russian) (82g:20078)

Mizuno, Kenzo The conjugate classes of unipotent elements of the Chevalley groups E_7 and E_8 . (82m:20046)

Petrov, Nikola T. Some maximal subgroups of the group $G_2(F)$, I, II. (Russian)

(82k:20033)

Scott, Leonard L. Representations in characteristic p . (82c:20052)

Seitz, Gary M. The root groups of a maximal torus. (82h:20022)

Srinivasan, Bhama Characters of finite groups of Lie type. II. (82c:20044)

Stanton, Dennis Some q -Krawtchouk polynomials on Chevalley groups. (82a:33015)

Wall, G. E. Conjugacy classes in projective and special linear groups. (82d:20041)

20G45 Applications to physics; explicit representations

secondary classifications:

Castrigiano, D. P. L. (with Mutze, U.) On the irreducible representations of groups containing a subgroup of finite index. (82j:22006)

Fedorov, F. I. ★Группы Лоренца. (Russian) [The Lorentz group] (82f:22011)

Mutze, U. See Castrigiano, D. P. L., (82j:22006)

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Greca, Eftimie Sur le groupe symplectique pseudo-orthogonal. (82c:20057)

Greenleaf, Frederick P. (with Moskowitz, M.; Rothschild, Linda Preiss) A unipotent group associated with certain linear groups. (82c:20076)

Justin, Jacques Groupes linéaires répétitifs. (English summary) (82h:20066)

Moskowitz, M. See Greenleaf, Frederick P.; et al., (82c:20076)

Rothschild, Linda Preiss See Greenleaf, Frederick P.; et al., (82c:20076)

secondary classifications:

Anderson, Mary J. Explicit expressions for the generators of the center of the enveloping algebra of real Lie algebras and for the algebra of bivariate operators on the group. (82j:17013)

Großer, Rainer ★Degenerationsverhalten nilpotenter Konjugationsklassen klassischer Lie-Algebren in Charakteristik 2. (German) [Degeneration behavior of nilpotent

- conjugacy classes of classical Lie algebras in characteristic 2] (82g:14044)
- Ishihashi, Hiroyuki Generators of $Sp(V)$ over a quasisemilocal semihiereditary ring. (82j:10042)
- Kneser, Martin Erzeugung ganzzahliger orthogonaler Gruppen durch Spiegelungen. (82i:10026)
- Korns, Mariusz Deformations of actions of linearly reductive groups. (82f:14048)
- Kozarackaja, L. N. (with Ostapenko, V. V.) Topological nilgroups of matrices. (Russian) (82c:22001)
- Ostapenko, V. V. See Kozarackaja, L. N., (82c:22001)
- Ostrom, T. G. Translation planes of even order in which the dimension has only one odd factor. (82h:51011)
- Putcha, Mohan S. Linear algebraic semigroups. (82g:20108)
- Serre, Jean-Pierre Arithmetic groups. (82b:22021)
- Steinberg, Robert Kleinian singularities and unipotent elements. (82j:14031)
- Waterhouse, William C. ★ Introduction to affine group schemes. (82c:14003)
- ### 20Hxx Other groups of matrices
- #### 20H05 Unimodular groups, congruence subgroups [See also 10D07, 22E40, 51F20.]
- Key, Jennifer D. Some maximal subgroups of certain projective unimodular groups. (82f:20077)
- Mason, A. W. On subgroups of $GL(n, A)$ which are generated by commutators. II. (82c:20056)
- Plesken, Wilhelm Bravais groups in low dimensions. (82c:20077)
- Thompson, John G. A finiteness theorem for subgroups of $PSL(2, R)$ which are commensurable with $PSL(2, Z)$. (82c:20067)
- secondary classifications:
- Ash, Avner Cohomology of congruence subgroups $SL(n, Z)$. (82f:22010)
- Grunewald, Fritz J. (with Schwermer, Joachim) Free nonabelian quotients of SL_2 over orders of imaginary quadratic numberfields. (82i:10027)
- Humphreys, James E. ★ Arithmetic groups. (82j:10041)
- Kirchheimer, Franz Über explizite Präsentationen Hilbertscher Modulgruppen zu totalreellen Körpern der Klassenzahl eins. (82j:10047)
- Schwermer, Joachim See Grunewald, Fritz J., (82i:10027)
- Ts'ao, Liang Chi A note on the cofinal problem for Hilbert modular groups. (82f:10028)
- #### 20H10 Fuchsian groups and their generalizations [See also 10D07, 22E40, 30F35, 32Nxx.]
- Abu Osman, M. T. (with Rosenberger, Gerhard) Embedding property of surface groups. (82c:20054)
- Fine, Benjamin Congruence subgroups of the Picard group. (82d:20044)
- Kruskal, S. L. Some rigidity theorems for discontinuous groups. (Russian) (82c:20078)
- Rosenberger, Gerhard See Abu Osman, M. T., (82c:20054)
- Serre, Jean-Pierre ★ Trees. (82c:20083)
- (Stillwell, John C.) See Serre, Jean-Pierre, (82c:20083)
- Zieschang, H. Decompositions of discrete groups of motions of the plane. (Russian) (82c:20079)
- secondary classifications:
- Beardon, A. F. Canonical generators of Fuchsian groups. (82h:30051)
- Brooks, Robert (with Mateski, J. Peter) The dynamics of 2-generator subgroups of $PSL(2, C)$. (82j:10045)
- Chetiya, B. P. On genuses of compact Riemann surfaces admitting solvable automorphism groups. (82k:14028)
- Cohn, Harvey Minimal geodesics on Fricke's torus-covering. (82i:10033)
- Doyle, Courtney (with James, David A.) Discreteness criteria and high order generators for subgroups of $SL(2, R)$. (82c:22028)
- Givental', A. B. Convolution of invariants of groups generated by reflections that are associated to simple singularities of functions. (Russian) (82f:58019)
- James, David A. See Doyle, Courtney, (82c:22028)
- (Jørgensen, Troels) See Rosenberger, Gerhard, (82c:30071)
- Kaul, Saroop K. (with Thompson, Dale V.) On a theorem of Nielsen. (82i:57007)
- Mateski, J. Peter See Brooks, Robert, (82j:10045)
- Metzger, Thomas A. On the nonvanishing of certain Poincaré series. (82h:30055)
- Milnor, John Hyperbolic geometry: the first 150 years. (82m:57005)
- Nicholls, Peter J. The orbital counting function for discrete groups of infinite volume. (82f:30050)
- Kleinian groups of divergence type. (82j:30071)
- Rosenberger, Gerhard Über Tschebyscheff-Polynome, Nicht-Kongruenzuntergruppen der Modulgruppe und Fibonacci-Zahlen. (82a:10026)
- Eine Bemerkung zu einer Arbeit von T. Jørgensen. (82c:30071)
- Stothers, W. W. On a result of Petersson concerning the modular group. (82c:10026)
- Thompson, Dale V. See Kaul, Saroop K., (82i:57007)
- Wason, Judith C. On infinite Nielsen kernels. (82c:30063)
- #### 20H15 Other geometric groups, including crystallographic groups [See also 51-XX, especially 51F15, and 82A60.]
- Belov, N. V. See Čuprunov, E. V.; et al., (82g:20074 and Soldatov, E. A.; et al., 82g:20075)
- Billiet, Yves The subgroups of finite index of the space groups: determination via conventional coordinate systems. (82c:20084)
- Bohm, Joachim Zur Anzahl kristallographischer Symmetriegruppenarten. (English summary) (82b:20068)
- Četin, G. M. (with Popov, V. P.; Raspopov, V. N.) Irreducible representations of hexagonal space groups. (82b:20069)
- Čuprunov, E. V. (with Tarhova, T. N.; Talis, A. L.; Belov, N. V.) Special positions in Fedorov groups. (Russian) (82g:20074)
- Damjanović, Milan (with Vujčić, Milan) Subgroups of weak-direct products and magnetic axial point groups. (82f:20078)
- Delaney, Matthew S. Quasisymmetries of space group orbits. (82b:20058)
- (Dress, Andreas W. M.) See Proceedings: Conference on Crystallographic Groups, (82c:20060)
- Ellers, Erich W. Generators and relations for classical groups. (82i:20057)
- Relations in hyperreflection groups. (82h:20059)
- Fichtner, Konrad On groupoids in crystallography. (82d:20045)
- Hall, S. R. Space-group notation with an explicit origin. (82c:20080a)
- Erratum: "Space-group notation with an explicit origin". (82c:20080b)
- Harker, David The three-colored three-dimensional space groups. (82k:20081)
- Ijehin, V. V. See Soldatov, E. A.; et al., (82g:20075)
- Janner, A. See de Wolff, P. M.; et al., (82k:20082)
- Janssen, T. See de Wolff, P. M.; et al., (82k:20082)
- Jarratt, John D. (with Schwarzenberger, Rolf L. E.) Coloured frieze groups. (82m:20050)
- Köhler, Klaus-Joachim Subgroup-relations between crystallographic groups. (82h:20060)
- On the structure and the determination of n -dimensional partially periodic crystallographic groups. (82j:20093a)
- An algorithm for finding the subgroups of n -dimensional crystallographic groups. (82j:20093b)
- Kotzev, J. N. On the new types of colour symmetry groups. (82c:20085)
- Kuz'min, E. A. See Soldatov, E. A.; et al., (82g:20075)
- Lomakina, Z. D. See Ryskov, S. S., (82c:20058)
- Mihailova, M. A. Finite imprimitive groups generated by pseudoreflections. (Russian) (82d:20046)
- Nakajima, Haruhisa Invariants of finite groups generated by pseudoreflections in positive characteristic. (82i:20058)
- Neubüser, Joachim (with Plesken, Wilhelm; Wondratschek, H.) An emendatory discussion on defining crystal systems. (82i:20059)
- (Neubüser, N.) See Proceedings: Conference on Crystallographic Groups, (82c:20060)
- Opechowski, W. Remarks on metacystallographic groups. (82h:20061)
- Plesken, Wilhelm See Neubüser, Joachim; et al., (82i:20059)
- Popov, V. P. See Četin, G. M.; et al., (82b:20069)
- Raspopov, V. N. See Četin, G. M.; et al., (82b:20069)
- Ryskov, S. S. (with Lomakina, Z. D.) A proof of the theorem on maximal finite groups of integral 5×5 matrices. (Russian) (82c:20058)
- Schwarzenberger, Rolf L. E. See Jarratt, John D., (82m:20050)
- Senéchal, Marjorie A simple characterization of the subgroups of space groups. (82c:20059)
- Serežkin, V. N. See Zaleskii, A. E., (82i:20060)
- Soldatov, E. A. (with Kuz'min, E. A.; Ijehin, V. V.; Belov, N. V.) On the symmetry of an N -dimensional translational lattice. (Russian) (82g:20075)
- Straume, Eldar J. The topological version of groups generated by reflections. (82d:20047)
- Talis, A. L. See Čuprunov, E. V.; et al., (82g:20074)
- Tarhova, T. N. See Čuprunov, E. V.; et al., (82g:20074)
- Vujčić, Milan See Damjanović, Milan, (82f:20078)
- Wagner, Ascher Determination of the finite primitive reflection groups over an arbitrary field of characteristic not two. II. (82g:20076)
- Wilker, John B. Topologically equivalent two-dimensional isometries. (82c:20086)
- de Wolff, P. M. (with Janssen, T.; Janner, A.) The superspace groups for incommensurate crystal structures with a one-dimensional modulation. (82k:20082)
- Wondratschek, H. Crystallographic orbits, lattice complexes, and orbit types. (82g:20077)
- See also Neubüser, Joachim; et al., (82i:20059)
- Zaleskii, A. E. (with Serežkin, V. N.) Finite linear groups generated by reflections. (Russian) (82i:20060)
- Bielefeld ★ Proceedings of the Conference on Kristallographische Gruppen. Part II. (82c:20060)
- Conference:
- Crystallographic Groups ★ Proceedings of the Conference on Kristallographische Gruppen. Part II. (82c:20060)
- Crystallographic groups ★ Proceedings of the Conference on Kristallographische Gruppen. Part II. (82c:20060)
- Proceedings:
- Conference on Crystallographic Groups ★ Proceedings of the Conference on Kristallographische Gruppen. Part II. (82c:20060)
- secondary classifications:
- Backhouse, Nigel An equivalence test for multipliers of projective representations of solvable groups. (82g:20029)
- Bärnighausen, H. Group-subgroup relations between space groups: a useful tool in crystal chemistry. (82h:81139)
- Beurskens, Paul T. A statistical interpretation of rotation and translation functions in reciprocal space. (82k:82045)
- Birman, Joseph L. Selection rules and symmetry breaking. (82k:82017)
- Božović, Ivan B. (with Vujčić, Milan) Irreducible representations of the symmetry groups of polymer molecules. II. (82g:20030)
- Charon, Jean-Louis See Weigel, Dominique; et al., (82c:52014)
- Coxeter, Harold Scott MacDonald The edges and faces of a 4-dimensional polytope. (82i:51030)
- Angels and devils. (See 82b:00003)
- D'Angelo, Mario On equiaffine planes. (82d:51004)
- De Meur, Gisèle Fischer subspaces of Hermitian manifolds. (82c:51017)
- Doković, Dragomir Ž. Relations between reflections in the unitary group and Hermitian hyperquadrics in the complex projective space. (82c:51019)
- Dress, Andreas W. M. On the classification and generation of two- and higher-dimensional regular patterns. (82i:51023a)

- Errata to: "On the classification and generation of two- and higher-dimensional regular patterns". (82i:51023b)
- Elfers, Erich W. Defining relations for the equiaffine group. (82j:51003)
- Engel, Peter Über Wirkungsbereichsteilungen von kubischer Symmetrie. (English summary) (82i:52025)
- Gallulin, R. V. Holohedral varieties of simple forms of crystals. (82h:52004)
- Delaunay systems. (82j:51030)
- Garit, V. P. Two-dimensional globally discrete groups of symmetry of the semi-Euclidean plane. (Russian) (82m:51017)
- Giacovazzo, Carmelo (with Vicković, Ivan) The theory of representations: its application to the estimation of the two-phase variants and semi-invariants. (82i:82053)
- Grunewald, Fritz J. See Mennicke, J. L., (82i:57009)
- Ignatenko, V. F. On algebraic surfaces with symmetry groups A_n , B_n , D_n . (Russian) (82m:14021)
- Janner, A. Z-module crystallography. (See 82h:81004)
- (with Janssen, T.) Symmetry of incommensurate crystal phases. I. Commensurate basic structures. (82i:82062a)
- (with Janssen, T.) Symmetry of incommensurate crystal phases. II. Incommensurate basic structure. (82i:82062b)
- (with Janssen, T.) Symmetry of incommensurate crystal phases in the superspace group approach. (82g:82047)
- Janssen, T. See Janner, A., (82g:82047); (82i:82062a) and (82i:82062b)
- Jarratt, John D. Stability of symmetry in crystal lattice hyperplanes. (82e:51021)
- Jha, Vikram (with Ostrom, T. G.) On u -groups acting on vector spaces and spreads with characteristic p . (82m:51009)
- Johnson, N. L. On the solvability of the collineation groups of derivable translation planes. (82j:51008)
- Kopcik, V. A. The symmetry of imperfect crystals. (82k:82046)
- Kopský, Vojtěch Exomorphism of group-subgroup relations and lattices of stability spaces. (82m:20033)
- Liebler, Robert A. Autotopism group representations. (82g:51004)
- Maxwell, George Space groups of Coxeter type. (82k:51009)
- Mennicke, J. L. (with Grunewald, Fritz J.) Some 3-manifolds arising from $PSL_2(\mathbb{Z}[i])$. (82i:57009)
- Mozzrymas, Jan Sur la structure des représentations de vibrations d'un réseau cristallin. (English summary) (82b:82064)
- Muradjan, R. M. Discrete subgroups of three-dimensional rotation groups. (Russian. English summary) (82j:22009)
- Normand, Jean-Marie ★ A Lie group: rotations in quantum mechanics. (82h:81001)
- Ostrom, T. G. Translation planes of dimension two with odd characteristic. (82g:51006)
- See also Jha, Vikram, (82m:51009)
- Pickert, Günter Partial planes with exactly two complete parallel classes. (82e:51006)
- Schwarzenberger, Rolf L. E. ★ n -dimensional crystallography. (82e:82018)
- Setondji, Jean Sur la G -structure définie par $n-p$ champs de vecteurs partout linéairement indépendants. (82h:53038)
- Sivardière, J. Cyclic and dihedral point groups as subgroups of the limiting groups. (German summary) (82k:82047)
- Veyseyre, Renée See Weigel, Dominique; et al., (82e:52014)
- Vicković, Ivan See Giacovazzo, Carmelo, (82i:82053)
- Vincenti, Rita The collineations group of a translation plane and the collineations group of an affine geometry. (82g:51007)
- Vujčić, Milan See Božović, Ivan B., (82g:20030)
- Weigel, Dominique (with Veyseyre, Renée; Charon, Jean-Louis) Sur la détermination géométrique de l'ordre du groupe de symétrie d'un polytope de l'espace euclidien à n dimensions. (English summary) (82e:52014)
- Wollny, Wolfgang Dualität von Cayley-Diagramm und Fundamentalbereichsparkett bei den diskreten 1-dimensionalen Bewegungsgruppen. (82h:51024)
- Zamorzeva, E. A. Super-crystallographic P -symmetries. (Russian) (82e:51015)
- Zieschang, H. Decompositions of discrete groups of motions of the plane. (Russian) (82k:20079)

20H20 Other matrix groups over fields

- Ambrosiewicz, Jan On the property W for the multiplicative group of the quaternions algebra. (Romanian summary) 82i:20061
- Grunewald, Fritz J. (with Segal, Daniel) Some general algorithms. I. Arithmetic groups. 82d:20048a
- Segal, Daniel See Grunewald, Fritz J., 82d:20048a

secondary classifications:

- Alperin, Roger C. (with Shalen, Peter B.) Linear groups of finite cohomological dimension. (82e:20087)
- Cassidy, Phyllis J. Differential algebraic group structures on the plane. (82j:12024)
- Elfers, Erich W. Relations in hyperreflexion groups. (82h:20059)
- Golubčik, I. Z. (with Mihalev, A. V.) Generalized group identities in classical groups. (Russian) (82j:20091)
- Knapp, A. W. (with Zuckerman, Gregg) Multiplicity one fails for p -adic unitary principal series. (82a:22020)
- Mihalev, A. V. See Golubčik, I. Z., (82j:20091)
- Pjasecki, V. S. A finiteness theorem for convex cones of finite type. (Russian) (82a:32037)
- Shalen, Peter B. See Alperin, Roger C., (82e:20087)
- Tišin, Ju. V. Generalized free products of abelian-by-finite linear groups. (Russian. English summary) (82h:20031)
- Zuckerman, Gregg See Knapp, A. W., (82a:22020)

20H25 Other matrix groups over rings

- Kirkwood, B. H. (with McDonald, B. R.) The symplectic group over a ring with one in its stable range. 82i:20062

McDonald, B. R. $\text{Aut}(\text{GL}_2(R))$ for rings with many units. 82m:20051

See also Kirkwood, B. H., 82i:20062

- Sharpe, R. W. On the structure of the Steinberg group $\text{St}(A)$. 82i:20083
- Sosnovskii, Ju. V. Isomorphisms of symplectic groups over division rings of characteristic not equal to 2. (Russian) 82m:20052

secondary classifications:

- Golubčik, I. Z. (with Mihalev, A. V.) Generalized group identities in classical groups. (Russian) (82j:20091)
- Lomakina, Z. D. Voronoi's polyhedron $\Pi(n)$ for $n=5$ and maximal finite groups of integral 5×5 matrices. (Russian) (82e:10057)
- Mihalev, A. V. See Golubčik, I. Z., (82j:20091)
- Mustafa-zade, N. M. On universality for GEU unitary rings. (Russian) (82e:18017)
- Petrov, E. E. Classes of conjugate elements of the group $\text{SL}(2, \mathbb{Z}/p^k\mathbb{Z})$, $p \neq 2$. (Russian) (82b:20064)
- Schnabel, Rudolf Eine ringtheoretische Kennzeichnung metabelscher Gruppen. (82i:20063)

20H30 Other matrix groups over finite fields

- Ishibashi, Hiroyuki Decomposition of isometries of isotropic $U_n(V)$ over finite fields into simple isometries. 82h:20062
- Koibaev, V. A. A description of D -complete subgroups of the general linear group over a field of three elements. (Russian) 82g:20078

20H99 None of the above, but in this section

secondary classifications:

- Bak, Anthony Le problème des sous-groupes de congruence et le problème métaplectique pour les groupes classiques de rang > 1 . (English summary) (82h:12009)
- Moshinsky, M. (with Seligman, Thomas H.) On the structure of phase space. (82j:70013)
- Seligman, Thomas H. See Moshinsky, M., (82j:70013)

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20J05 Homological methods in group theory

- Alperin, Roger C. (with Shalen, Peter B.) Linear groups of finite cohomological dimension. 82e:20087
- Avrunin, George S. The image of the restriction map on 2-cohomology. 82e:20088
- Basistov, A. A. Cohomology of groups with operators. (Russian. English summary) 82i:20070
- Bass, Hyman Traces and Euler characteristics. 82i:20063
- Baumslag, Gilbert (with Dyer, Eldon; Miller, Charles F., III) On the integral homology of finitely presented groups. 82e:20089
- Curran, Peter M. (with Locke, Janet Schillinger) Cohomology and the rank of a subgroup. 82i:20064
- Curtis, Charles W. Homology representations of finite groups. 82e:20090
- Dyer, Eldon See Baumslag, Gilbert; et al., 82e:20089
- Eckmann, Beno Some recent developments in the homology theory of groups (groups of finite and virtually finite dimension). 82d:20049
- Heller, Alex Some topological methods in abstract group theory. 82a:20055
- Holt, D. F. Exact sequences in cohomology and an application. 82h:20063
- On the cohomology of locally finite groups. 82k:20084
- Horadam, K. J. The diagonal comultiplication on homology. 82m:20053
- Lemaire, Claude R -completions et actions de groupe. 82e:20061
- Locke, Janet Schillinger See Curran, Peter M., 82i:20064
- Meier, David On the homological dimension of poly-locally free groups. 82e:20091
- Miller, Charles F., III See Baumslag, Gilbert; et al., 82e:20089
- Müller, Heinz Decomposition theorems for group pairs. 82e:20062
- Ratcliffe, John G. On one-relator groups which satisfy Poincaré duality. 82j:20094
- Schafer, James A. Relation modules for extensions of nilpotent groups. 82i:20079
- Shalen, Peter B. See Alperin, Roger C., 82e:20087
- Tappe, Jürgen Some remarks on the homology groups of wreath products. 82d:20050
- Webb, P. J. Minimal relation modules of free nilpotent groups. 82m:20054

secondary classifications:

- Cegarra, A. M. See Grandjean, A. R., (82k:18014)
- Chaladus, Stefan Lower bounds of the order of $K_2(ZG)$ for a cyclic p -group G . (Russian summary) (82e:13013)
- Fournelle, Thomas A. Finite groups of automorphisms of infinite groups. I. (82j:20078)
- Gluck, David Idempotent formula for the Burnside algebra with applications to the p -subgroup simplicial complex. (82e:20005)
- Grandjean, A. R. (with Cegarra, A. M.) Cohomology with respect to a variety of a category. (Spanish) (82k:18014)
- Gruenberg, K. W. (with Roggenkamp, K. W.) Extension categories of groups and modules. II. Stem extensions. (82i:16031)
- Grünfelder, Luzius Lower central series, augmentation quotients and homology of groups. (82a:20044)
- Horadam, K. J. A quick test for nonisomorphism of one-relator groups. (82j:20069)
- Jara Martínez, P. ★ (G, n) -extensiones especiales en la cohomología de grupos. (Spanish) [Special (G, n) -extensions in the cohomology of groups] (82e:18020)
- Kassel, Christian K -théorie relative d'un idéal bilatère de carré nul: étude homologique en basse dimension. (82i:18015)
- Madsen, Ib Spherical space forms: a survey. (82m:57025)
- Pirashvili, T. I. Spectral sequence of the epimorphism for (co)homology of groups and algebraic K -functors. (Russian. Georgian and English summaries) (82m:18007)
- Roggenkamp, K. W. See Gruenberg, K. W., (82i:16031)

Schneider, Hans-Jürgen Restriktion und Corestriktion für algebraische Gruppen. (82f:14045)

Sjogren, J. A. Dimension and lower central subgroups. (82j:20080)

Webb, P. J. The projective extensions of a finite group. (82m:20066)

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20J06 Cohomology of finite groups

Avrunin, George S. (with Scott, Leonard L.) A Quillen stratification theorem for modules. 82m:20055

Glasunov, N. M. Algorithms for calculation of cohomology groups of finite groups. I. (Russian) 82f:20080

Gorjunov, V. V. Cohomology of braid groups of series C and D . (Russian) 82k:20085

Ogawa, Yoshito On the cohomology of finite groups. 82c:20092

Sasaki, Hiroki Some transfer theorems for Schur multipliers. 82g:20079

Scott, Leonard L. See Avrunin, George S., 82m:20055

secondary classifications:

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Avrunin, George S. Annihilators of cohomology modules. (82j:20021)

Evens, L. See Alperin, J. L., (82j:20020)

Holt, D. F. Exact sequences in cohomology and an application. (82h:20063)

Schmid, Wilfried Vanishing theorems for Lie algebra cohomology and the cohomology of discrete subgroups of semisimple Lie groups. (82h:17009)

Scott, Leonard L. Representations in characteristic p . (82e:20052)

Yoshida, Tomoyuki On G -functors. I. Transfer theorems for cohomological G -functors. (82d:20016)

20J10 Groups arising as cohomology groups

Bürgisser, Balz On the p -periodicity of arithmetic subgroups of general linear groups. 82h:20064a

Finite p -periodic quotients of general linear groups. 82h:20064b

secondary classifications:

Avrunin, George S. Generic cohomology for twisted groups. (82m:20048)

Early, Theresa E. (with Kreimer, H. F.) Galois algebras and Harrison cohomology. (82h:16034)

Hausmann, Jean-Claude Groupes de lacets et espaces classifiants. (English summary) (82h:55009)

Kreimer, H. F. See Early, Theresa E., (82h:16034)

Schneider, Hans-Jürgen Zerlegbare Erweiterungen affiner Gruppen. (82f:14044)

Todua, Z. B. Homology and cohomology groups of a distributive lattice. (Russian. Georgian and English summaries) (82m:06016)

20J15 Category of groups

secondary classifications:

Bueso Montero, J. L. ★ Invariantes de Baer en una categoría de Kurosh. (Spanish) [Baer invariants in a Kurosh category] (82a:18011)

Gonzalez Dorrego, M. R. ★ Producto de formaciones en una categoría de Burgin. (Spanish) [Product of formations in a Burgin category] (82h:18008)

Mihailov, E. N. Duality in categories of topological groups. (Russian) (82e:22013)

Algebra See Bueso Montero, J. L., (82a:18011) and Gonzalez Dorrego, M. R., (82h:18008)

20J99 None of the above, but in this section

Holt, D. F. Uncountable locally finite groups have one end. 82m:20056

Huetschmann, Johannes Crossed n -fold extensions of groups and cohomology. 82e:20063

secondary classifications:

tom Dieck, Tammo (with Petrie, Ted) The homotopy structure of finite group actions on spheres. (82h:57030)

Petrie, Ted See tom Dieck, Tammo, (82h:57030)

Yoshida, Tomoyuki Transfer theorems. (82h:18013)

20Kxx Abelian groups

secondary classifications:

Felgner, Ulrich Horn theories of abelian groups. (82d:03055)

20K01 Finite abelian groups

Erdős, Paul (with Smith, B.) Finite abelian group cohesion. 82m:20057

Ganjudkin, A. G. Enumeration of subgroups of a finite abelian group (algorithm). (Russian) 82e:20064a

Enumeration of subgroups of a finite abelian group (theory). (Russian) 82e:20064b

Smith, B. See Erdős, Paul, 82m:20057

Szabó, Sándor Finite abelian groups and n -dimensional mosaics. (Hungarian) 82i:20065

secondary classifications:

Dinitz, J. H. (with Stinson, D. R.) A fast algorithm for finding strong starters. (82e:05033)

Kritzel, Ekkehard Die Werteverteilung der Anzahl der nicht-isomorphen Abelschen Gruppen endlicher Ordnung in kurzen Intervallen. (82g:10069)

Nakajima, Haruhisa Invariants of finite abelian groups generated by transvections. (82e:14058)

Stinson, D. R. See Dinitz, J. H., (82e:05033)

Szabó, Sándor On decomposing finite abelian groups. (82c:52017)

Zelinka, Bohdan Graph representations of finite abelian groups. (82m:05055)

20K05 Finitely generated groups

20K10 Torsion groups, primary groups and generalized primary groups

Benabdallah, Khalid (with Robert, Serge) Intersections finies de sous-groupes nets. 82a:20056

Cherly, J. On complementary sets of group elements. 82j:20095

Cutler, Doyle O. Primary abelian groups having all high subgroups isomorphic. 82k:20086

Feigelstock, Shalom The additive groups of subdirectly irreducible rings. 82k:20087a

The additive groups of subdirectly irreducible rings. II. 82k:20087b

Fuchs, László The socles of totally projective p -groups. 82b:20071

★ Abelian p -groups and mixed groups. 82f:20081

Hassell, Johnette On the torsion product of valued vector spaces. 82j:20096

Hill, Paul Criteria for total projectivity. 82k:20088

The third axiom of countability for abelian groups. 82k:20089

Hunter, Roger (with Walker, Elbert) S -groups revisited. 82c:20093

Kirkwood, Ian The isomorphism semigroup of a periodic abelian group. 82h:20072

Robert, Serge See Benabdallah, Khalid, 82a:20056

Vinsonhaler, C. (with Wickless, W.) The injective hull of a separable p -group as an E -module. 82m:20058

Walker, Elbert See Hunter, Roger, 82c:20093

Wickless, W. See Vinsonhaler, C., 82m:20058

Zanardo, Paolo On p^{n+2} -projective p -groups. 82d:20051

secondary classifications:

Baudisch, Andreas The theory of abelian p -groups with the quantifier I is decidable. (82g:03068)

Camion, P. Une généralisation dans les p -groupes abéliens élémentaires, $p > 2$, des théorèmes de H. B. Mann et J. F. Dillon sur les ensembles à différences des 2-groupes abéliens élémentaires. (82h:05028)

Hausen, Jutta (with Johnson, Johnny A.) Separability of sufficiently projective p -groups as reflected in their endomorphism rings. (82i:20066)

Johnson, Johnny A. See Hausen, Jutta, (82i:20066)

20K12 Ulm sequences

20K15 Torsion free groups, finite rank

Benabdallah, Khalid (with Birtz, A.) Sur une famille de groupes abéliens super-décomposables. 82j:20097

Bican, Ladislav A note on factor-splitting abelian groups of rank two. 82m:20059

Birtz, A. See Benabdallah, Khalid, 82j:20097

Botha, J. D. Rank distributions in direct decompositions of torsion-free abelian groups. (See 82i:16002)

Burkhardt, R. (with Mutzbauer, O.) Decompositions of torsion free abelian groups of rank 3. 82c:20094

Mutzbauer, O. See Burkhardt, R., 82c:20094

Schultz, Phillip Correction to: "The typeset and cotypeset of a rank 2 abelian group" [Pacific J. Math. 78 (1978), no. 2, 503-517; MR 80a:20062]. 82m:20060

Vinsonhaler, C. Corrections to: "Torsion free abelian groups quasiprojective over their endomorphism rings. II" [Pacific J. Math. 74 (1978), no. 1, 261-265; MR 58 #927b]. 82k:20090

(with Wickless, W.) A theorem on quasi-pure-projective torsion free abelian groups of finite rank. 82e:20065

Wickless, W. See Vinsonhaler, C., 82e:20065

secondary classifications:

Byrd, Richard D. (with Lloyd, Justin T.; Mena, Roberto A.; Teller, J. Roger) Extensions of group retractions. (82a:20040)

Dlab, Vlastimil ★ Representations of valued graphs. (82k:16037)

Dobrica, V. P. Constructivizable abelian groups. (Russian) (82i:03058)

Feigelstock, Shalom The additive groups of subdirectly irreducible rings. (82k:20087a)

The additive groups of subdirectly irreducible rings. II. (82k:20087b)

Groenewald, N. J. On the Brown-McCoy radical of group rings. (82i:16011)

Hill, Paul The third axiom of countability for abelian groups. (82k:20089)

Lloyd, Justin T. See Byrd, Richard D.; et al., (82a:20040)

Mena, Roberto A. See Byrd, Richard D.; et al., (82a:20040)

Teller, J. Roger See Byrd, Richard D.; et al., (82a:20040)

20K20 Torsion free groups, infinite rank

Cornelius, E. F., Jr. A sufficient condition for separability. 82c:20095

D'Este, Gabriella Torsion-free abelian groups and completely decomposable p -adic modules. 82a:20057

Göbel, Rüdiger (with Wald, Burkhard) Wachstumstypen und schlanke Gruppen. 82h:20073

(with Wald, Burkhard) Martin's axiom implies the existence of certain slender groups. **82c:20096**
Procházka, Ladislav Sur p -indépendance et p^∞ -indépendance en des groupes sans torsion. **82a:20058**

A note on p -adic completion of torsion-free abelian groups. **82c:20066**
Shelah, Saharon On uncountable abelian groups. **82b:03054**
Wald, Burkhard See Göbel, Rüdiger, **82b:20073** and **82c:20096**

secondary classifications:

Byrd, Richard D. (with Lloyd, Justin T.; Mena, Roberto A.; Teller, J. Roger) Extensions of group retractions. **(82a:20040)**
Dugas, Manfred Fast freie abelsche Gruppen mit Endomorphismenring Z . [Almost free abelian groups with endomorphism ring Z] **(82k:20093)**
Effros, Edward G. (with Shen, Chao Liang) The geometry of finite rank dimension groups. **(82c:46077)**
Feigelstock, Shalom The additive groups of subdirectly irreducible rings. **(82k:20087a)**
 The additive groups of subdirectly irreducible rings. II. **(82k:20087b)**
Groenewald, N. J. On the Brown-McCoy radical of group rings. **(82i:16011)**
Hill, Paul The third axiom of countability for abelian groups. **(82k:20089)**
Kožuhov, S. F. Regularly simple abelian groups. (Russian) **(82j:20100)**
Lloyd, Justin T. See Byrd, Richard D.; et al., **(82a:20040)**
Mena, Roberto A. See Byrd, Richard D.; et al., **(82a:20040)**
Pedersen, Franklin D. (with Sizer, Walter S.) Subsemigroups of the finite complexes of a group. **(82i:20082)**
Shen, Chao Liang See Effros, Edward G., **(82c:46077)**
Sizer, Walter S. See Pedersen, Franklin D., **(82i:20082)**
Teller, J. Roger See Byrd, Richard D.; et al., **(82a:20040)**

20K21 Mixed groups

Fuchs, László (with Toubassi, E.) On rank one mixed abelian groups with $p^{m/n}$ -projective p -components. **82c:20097**
Hunter, Roger (with Richman, Fred) Global Warfield groups. **82k:20091**
Megibben, Charles K. Separable mixed groups. **82b:20074**
Richman, Fred See Hunter, Roger, **82k:20091**
Schoeman, M. J. Quasisplitting abelian groups. (See **82i:16002**)
Toubassi, E. See Fuchs, László, **82c:20097**

secondary classifications:

Fuchs, László ★Abelian p -groups and mixed groups. **(82i:20081)**

20K25 Direct sums, direct products, etc.

Buckley, Joseph (with Wiegold, James) On the number of $\{Q, I\}$ -closed classes of abelian p -groups. **82d:20052**
Göbel, Rüdiger (with Wald, Burkhard) Lösung eines Problems von L. Fuchs. **82j:20098**
Goldsmith, B. A note on products of infinite cyclic groups. **82k:20092**
Ivanov, A. V. Kaplansky's test problem. (Russian) **82m:20061**
Manley, P. L. Direct limits of free abelian groups with finite rank. **82a:20059**
Ryčkov, S. V. On direct products of abelian groups. (Russian) **82h:20075**
Wald, Burkhard See Göbel, Rüdiger, **82j:20098**
Wiegold, James See Buckley, Joseph, **82d:20052**

secondary classifications:

Akmalov, N. A. Topologies in the tensor product of abelian groups. (Russian) **(82b:22001)**
Steiner, Richard J. An isomorphism between products of abelian groups. **(82c:55007)**

20K26 Indecomposable groups

Dugas, Manfred Fast freie abelsche Gruppen mit Endomorphismenring Z . [Almost free abelian groups with endomorphism ring Z] **82k:20093**

20K27 Subgroups

Boyer, D. (with Rangaswamy, K. M.) Intersections of pure subgroups in abelian groups. **82b:20076**
Entringer, Roger C. (with Higgins, F. E.) On the intersection of the factors of certain group factorizations. **82c:20067**
Higgins, F. E. See Entringer, Roger C., **82c:20067**
Keane, William J. Imbedded N -high subgroups of abelian groups. **82j:20099**
Rangaswamy, K. M. See Boyer, D., **82b:20076**

secondary classifications:

Benabdallah, Khalid (with Robert, Serge) Intersections finies de sous-groupes nets. **(82a:20056)**
Khan, M. Ahmad When are proper subgroups of LCA groups contained in maximal ones? **(82m:22007)**
Moore, T. E. Isomorphisms between groups of rational numbers. **(82c:20001)**
Robert, Serge See Benabdallah, Khalid, **(82a:20056)**
Ryčkov, S. V. On direct products of abelian groups. (Russian) **(82b:20075)**

20K30 Automorphisms, homomorphisms, endomorphisms, etc.

Hausen, Jutta (with Johnson, Johnny A.) Separability of sufficiently projective p -groups as reflected in their endomorphism rings. **82i:20066**
Johnson, Johnny A. See Hausen, Jutta, **82i:20066**

Kožuhov, S. F. Regularly complete abelian groups. (Russian) **82i:20067**
 Regularly simple abelian groups. (Russian) **82j:20100**
Ngo Dak Tan Über abelsche Gruppen, deren voller Endomorphismenring ein EE_k - MI -ring ($k=1, 2$) ist. **82c:20098**
Oxford, Ed (with Walls, Gary) Endocyclic groups. **82k:20094**
Puusepp, P. On the determination of a torsion abelian group by its semigroup of endomorphisms. (Russian, Estonian and English summaries) **82h:20065a**
 On the determination of a torsion abelian group by its semigroup of endomorphisms in the class of all periodic abelian groups. (Russian, Estonian and English summaries) **82h:20065b**
Walls, Gary See Oxford, Ed, **82k:20094**
Wesolowski, Tadeusz On automorphisms of idempotent reducts of abelian groups with a prime exponent. (Polish, English summary) **82a:20060**

secondary classifications:

Benabdallah, Khalid (with Birtz, A.) Sur une famille de groupes abéliens super-décomposables. **(82j:20097)**
Birtz, A. See Benabdallah, Khalid, **(82j:20097)**
Dugas, Manfred Fast freie abelsche Gruppen mit Endomorphismenring Z . [Almost free abelian groups with endomorphism ring Z] **(82k:20093)**
Fournelle, Thomas A. Elementary abelian p -groups as automorphism groups of infinite groups. II. **(82c:20047)**
Franciosi, Silvana Some monomorphisms between lattices of subgroups. (Italian, English summary) **(82a:20037)**
Goldsmith, B. A note on products of infinite cyclic groups. **(82k:20092)**
Kabenjuk, M. I. Some topologies on abelian group related to the ring of its endomorphisms. **(82d:16036)**
Vinsonhaler, C. (with Wickless, W.) The injective hull of a separable p -group as an E -module. **(82m:20058)**
Wickless, W. See Vinsonhaler, C., **(82m:20058)**

20K35 Extensions

20K40 Homological and categorical methods

Eklöf, Paul C. (with Huber, Martin) On the rank of Ext. **82a:20061**
Harting, Roswitha A remark on injectivity of sheaves of abelian groups. **82j:20101**
Huber, Martin See Eklöf, Paul C., **82a:20061** and Warfield, R. B., Jr., **82b:20077**
Mashhood, Asif On groups of neat and pure-high extensions. **82j:20102a**
 On groups of neat and pure-high extensions. **82j:20102b**
Onishi, Makoto Neat-injectivity and neat-projectivity in abelian groups. **82d:20053**
Skljarenko, E. G. On the Manovcev-Kuz'minov theorem. (Russian) **82j:20103**
Vinsonhaler, C. (with Wickless, W.) Quasiprojective and quasi-injective finite valued groups. **82j:20104**
Warfield, R. B., Jr. (with Huber, Martin) On the values of the functor \lim^1 . **82b:20077**
White, Erinn Erb On the homological dimension of valued vector spaces. **82d:20054**
Wickless, W. See Vinsonhaler, C., **82j:20104**

secondary classifications:

Ansari, A. Halim See Khan, M. Zubair, **(82g:18001)**
Boyer, D. (with Mader, A.) Functorial topologies on abelian groups. **(82f:20082)**
Khan, M. Zubair (with Ansari, A. Halim) A note on certain subgroups of Hom. **(82g:18001)**
Lady, E. L. Extension of scalars for torsion free modules over Dedekind domains. **(82i:13011)**
Mader, A. See Boyer, D., **(82f:20082)**
Shelah, Saharon Whitehead groups may not be free, even assuming CH. II. **(82h:03055)**
 The consistency of $\text{Ext}(G, Z) = Q$. **(82k:03084)**

20K45 Topological methods

Boyer, D. (with Mader, A.) Functorial topologies on abelian groups. **82f:20082**
D'Este, Gabriella The \oplus -topology on abelian p -groups. **82a:20062**
Mader, A. See Boyer, D., **82f:20082**

secondary classifications:

Göbel, Rüdiger (with Wald, Burkhard) Wachstumstypen und schlanke Gruppen. **(82b:20073)**
Prodanov, Iv. Maximal and minimal topologies on abelian groups. **(82i:22003)**
Wald, Burkhard See Göbel, Rüdiger, **(82b:20073)**

20K99 None of the above, but in this section

Ersöv, Ju. L. Algebraically compact groups. (Russian) **82c:20099a**
 Algebraically compact groups. II. (Russian) **82c:20099b**
Gvaramija, A. A. On a substitution in an abelian group. (Russian, Georgian and English summaries) **82h:20066**
Ivanov, A. V. A class of abelian groups. (Russian) **82g:20080**
Moskalenko, A. I. Continuation of products on a mixed abelian group of countable rank. (Russian) **82g:20081**
Zaitsev, D. I. Extensions of abelian groups. (Russian) **82g:20082**
 Groups of operators of finite rank and their application. (Russian) **82g:20083**

secondary classifications:

Baudisch, Andreas (with Seese, Detlef G.; Tuschik, Hans-Peter; Weese, Martin) ★Decidability and generalized quantifiers. **(82i:03048)**

- The elementary theory of abelian groups with m -chains of pure subgroups. (82b:03026)
- De Koninck, Jean-Marie (with Ivić, Aleksandar) ★Topics in arithmetical functions. (82a:10047)
- Eklof, Paul C. (with Mekler, Alan H.) Infinitary stationary logic and abelian groups. (82j:03042)
- Feigelstock, Shalom The additive groups of local rings. (82i:13021)
- Gončarov, S. S. Autostability of models and abelian groups. (Russian) (82g:03081)
- Hodges, Wilfrid Constructing pure injective hulls. (82a:03029)
- In singular cardinality, locally free algebras are free. (82i:08005)
- Ivić, Aleksandar See De Koninck, Jean-Marie, (82a:10047)
- Komori, Yuichi Completeness of two theories on ordered abelian groups and embedding relations. (82c:03053)
- Lin, Charlotte Recursively presented abelian groups: effective p -group theory. I. (82j:03054)
- Mekler, Alan H. How to construct almost free groups. (82b:20038)
- See also Eklof, Paul C., (82j:03042)
- Mordeson, John N. Modular extensions and abelian groups. (82j:12028)
- Nakajima, Haruhisa On some invariant subrings of polynomial rings in positive characteristics. (82b:13012)
- Nicolas, Anne-Marie Généralisation d'un critère de Pontryagin concernant les groupes sans torsion dénombrables à des modules sans torsion sur des anneaux de Dedekind. Conditions de rang, de type, de chaînes ascendantes. (82e:13016)
- Seese, Detlef G. See Baudisch, Andreas; et al., (82i:03048)
- Stöhr, R. Freie Produkte torsionsfreier abelscher Gruppen in der Varietät der zentralen Erweiterungen metabelscher Gruppen. (82g:20065)
- Tuschik, Hans-Peter See Baudisch, Andreas; et al., (82i:03048)
- Weese, Martin See Baudisch, Andreas; et al., (82i:03048)

20Lxx Groupoids (small categories in which all morphisms are isomorphisms)

20L05 General theory

- Dudek, József Some remarks on distributive groupoids. 82n:20095
- Ježek, Jaroslav (with Kepka, Tomáš) Free entropic groupoids. 82h:20067
- Kepka, Tomáš See Ježek, Jaroslav, 82h:20067

secondary classifications:

- Pollák, G. (with Szendrei, Ágnes) Independent basis for the identities of entropic groupoids. (82e:08009)
- Szendrei, Ágnes See Pollák, G., (82e:08009)

20L10 Connections with group theory

- Fichtner, Konrad Über geometrische Äquivalenz von Symmetrie-Gruppoiden. 82h:20078

secondary classifications:

- Horadam, K. J. The word problem and related results for graph product groups. (82e:20043)
- Schultz, Barbara Über die induktive Isomorphie von endlichen Gruppen. II. (82f:20048)

20L13 Mappings of groupoids

- Lex, W. Beziehungen zwischen Rechtstranslationen eines Gruppoids (G, \cdot) und den Endomorphismen des Aktes ${}_cG$. 82m:20062

20L15 Connections with topology

20L17 Connections with category theory

20L99 None of the above, but in this section

- Fichtner, Konrad Ein Verfahren zur Ableitung der OD-Gruppoid-Familien von Brandtschen OD-Gruppoiden. 82b:20079

secondary classifications:

- da Costa Reis, M. Raquel P. Partial residuals in groupoid-lattices. II. (82f:06011)
- Dudek, József A new characterization of groupoids with at most n essentially n -ary polynomials. (82g:08012)
- Ježek, Jaroslav (with Kepka, Tomáš) Semigroup representations of medial groupoids. (82k:20109)
- Kepka, Tomáš See Ježek, Jaroslav, (82k:20109)

20Mxx Semigroups

secondary classifications:

- (Jürgensen, H.) See Semigroups, (82f:20009)
- Knauer, Ulrich Zur Entwicklung der algebraischen Theorie der Halbgruppen. (English summary) (82d:01019)
- (Lajos, Sándor) See Notes on semigroups, (82f:20007)
- (Murata, Kentaro) See Proceedings: Symposium on Semigroups, (82f:20008)
- (Petrich, Mario) See Semigroups, (82f:20009)
- (Weinert, Hanns Joachim) See Semigroups, (82f:20009)
- Conference:
Semigroups ★Semigroups. (82f:20009)

- Notes on semigroups ★Notes on semigroups. VI. (82f:20007)

- Oberwolfach ★Semigroups. (82f:20009)

Proceedings:

- Symposium on Semigroups ★Proceedings of the 4th Symposium on Semigroups. (82f:20008)

- Semigroups ★Notes on semigroups. VI. (82f:20007)

- ★Proceedings of the 4th Symposium on Semigroups. (82f:20008)

- ★Semigroups. (82f:20009)

- Semigroups and related topics ★Semigroups and related topics. (Japanese) (82a:20002)

Symposium:

- Semigroups ★Proceedings of the 4th Symposium on Semigroups. (82f:20008)

- Semigroups and Related Topics ★Semigroups and related topics. (Japanese)

- (82a:20002)

- Yamaguchi ★Proceedings of the 4th Symposium on Semigroups. (82f:20008)

20M05 Free semigroups, generators and relations, word problem

- Césari, Yves (with Vincent, Max) Une caractérisation des mots périodiques. (English summary) 82a:20063
- Gerhard, J. A. (with Petrich, Mario) The word problem for orthogroups. 82m:20063
- Jura, Andrzej Some remarks on nonexistence of an algorithm for finding all ideals of a given finite index in a finitely presented semigroup. 82f:20083
- Kašinec, E. V. An algorithm for the solution of the conjugacy problem for certain semigroups. (Russian) 82h:20068
- Le Rest, Evelyne (with Le Rest, Michel) Sur le calcul du monoïde syntaxique d'un sous monoïde finiment engendré. 82b:20080
- Le Rest, Michel See Le Rest, Evelyne, 82b:20080
- Lisovik, L. P. On quasi-identities in a free semigroup. (Russian) 82h:20069
- Makanin, G. S. Equations on a free semigroup. (Russian) 82h:20081
- Munn, W. D. An embedding theorem for free inverse semigroups. 82k:20096
- Petrich, Mario (with Reilly, Norman R.) Certain Rees matrix semigroups with universal properties. 82d:20055
- See also Gerhard, J. A., 82m:20063

- Putcha, Mohan S. Generalization of Lentin's theory of principal solutions of word equations in free semigroups to free product of copies of positive reals under addition. 82j:20105

- Reilly, Norman R. See Petrich, Mario, 82d:20055

- Rolov, E. V. Subsemigroups of a class of semigroups. (Russian) 82e:20068

- Scheiblich, H. E. The free elementary \ast -orthodox semigroup. 82e:20069

- Spehner, J.-C. Les présentations des sous-monoïdes de rang 3 d'un monoïde libre. 82i:20068

- Vincent, Max See Césari, Yves, 82a:20063

secondary classifications:

- Boë, Jean Marie (with De Luca, Aldo; Restivo, Antonio) Minimal complete sets of words. (82e:94060)
- Capocelli, Renato M. On weakly prefix subsemigroups of a free semigroup. (82e:94057)
- De Luca, Aldo See Boë, Jean Marie; et al., (82e:94060)
- Djadčenko, G. G. On the structure of monogenic inverse semigroups. (Russian) (82j:20109)
- Hall, T. E. (with Jones, Peter R.) On the lattice of varieties of bands of groups. (82j:08011)
- Jones, Peter R. See Hall, T. E., (82j:08011)
- Kobayashi, Yuji Another graded algebra with a nonrational Hilbert series. (82g:16002)
- Krivoi, S. L. Search for relations in programs over free groups of data. (Russian) (82m:68042)
- Märki, L. (with Miltz, Rainer) Free monoids and strict radicals. (82j:20121)
- Miltz, Rainer See Märki, L., (82j:20121)
- Restivo, Antonio See Boë, Jean Marie; et al., (82e:94060)
- Rosenow, Wolfgang Analogon eines Satzes von Baer und Levi in der Klasse aller Halbgruppen. [Analogue of a theorem of Baer and Levi in the class of semigroups] (82j:20116)
- Silberger, D. M. How many unbordered words? (82f:20098)

20M07 Varieties of semigroups

- Artamonov, V. A. Minimal varieties of generalized semigroups, groups and rings. (Russian) 82d:20056
- Boguta, B. K. (with Nikolaev, A. M.) A remark on coverings of semigroup varieties. (Russian) 82b:20082
- Clarke, G. T. On completely regular semigroup varieties and the amalgamation property. 82b:20083
- Commutative semigroup varieties with the amalgamation property. 82f:20084
- Edmunds, Charles C. Varieties generated by semigroups of order four. 82c:20100
- Jones, Peter R. Universal aspects of completely simple semigroups. 82a:20064
- The Hopf property and K -free products of semigroups. 82c:20101
- Kublanovskii, S. I. Finite approximability of prevarieties of semigroups with respect to predicates. (Russian) 82g:20084
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 Pap, Endre On the ZED-integral. (Serbo-Croatian summary) **(82f:28012)**
 Pastijn, Francis Bordered sets and complemented modular lattices. **(82b:20090)**
 Reutenauer, Christophe Séries formelles et algèbres syntactiques. (English summary) **(82g:68075)**
 Sierpińska, Anna K -completeness and its application to radicals of semigroup rings. **(82c:16009)**
 Ștefănescu, Mirela Self-distributive infra-near rings. (Italian summary) **(82m:16035)**

20M30 Representation of semigroups

- Adams, M. E. (with Pigozzi, D.; Sichler, J.) Endomorphisms of direct unions of bounded lattices. **82f:20097**
 Gagnon, F.-P. A representation theorem for I -medial and for generalized inverse semigroups. **82k:20107**
 Gudder, Stanley P. (with Michel, John R.) Representations of Baer \ast -semigroups. **82j:20127**
 Jürgensen, H. Transformationendarstellungen endlicher abstrakt präsentierter Halbgruppen. (English summary) **82g:20104**
 Michel, John R. See Gudder, Stanley P., **82j:20127**
 Murti, G. Suryanarayana See Swamy, U. Maddana, **82g:20105**
 Nasirov, S. N. Representations of semigroups in Boolean algebras. (Russian) **82k:20108**
 Pigozzi, D. See Adams, M. E.; et al., **82f:20097**
 Rukolaine, A. V. Semigroup algebras of finite inverse semigroups over arbitrary fields. (Russian) **82g:20106**

- Sichler, J. See Adams, M. E.; et al., **82f:20097**

- Swamy, U. Maddana (with Murti, G. Suryanarayana) Boolean centre of a semigroup. **82g:20105**

secondary classifications:

- Hall, T. E. Generalized inverse semigroups and amalgamation. **(82i:20087)**
 Kil'p, M. Left completely flat monoids that are unions of groups. (Russian. Estonian and English summaries) **(82c:20076)**
 Knauer, Ulrich (with Mihalev, A. V.) Endomorphism monoids of free acts and 0-wreath products of monoids. I. Annihilator properties. **(82c:20104a)**
 (with Mihalev, A. V.) Endomorphism monoids of free acts and 0-wreath products of monoids. II. Regularity. **(82c:20104b)**
 (with Mihalev, A. V.) Endomorphism monoids of free acts and 0-wreath products of monoids. III. Standard involution and continuous endomorphisms. **(82c:20104c)**
 Mihalev, A. V. See Knauer, Ulrich, **(82c:20104a)**; **(82c:20104b)** and **(82c:20104c)**
 Pastijn, Francis Bordered sets and complemented modular lattices. **(82b:20090)**

20M35 Semigroups in automata theory, linguistics, etc. [See also 03D05, 68D30, 68Fxx.]

- Chaput, Daniel (with Sabidussi, Gert) Une généralisation du théorème de Ginsburg-Rose. **82a:20078**
 Lallement, Gérard Cyclotomic polynomials and unions of groups. **82m:20071**
 Lisovik, L. P. Strict sets and finite semigroup coverings. **82e:20080**
 See also Red'ko, V. N., **82b:20101**
 Margolis, Stuart W. On M -varieties generated by power monoids. **82j:20128**
 Perrin, D. (with Perrot, J.-F.) A propos des groupes dans certains monoides syntactiques. **82g:20107**
 Perrot, J.-F. See Perrin, D., **82g:20107**
 Red'ko, V. N. (with Lisovik, L. P.) Regular events in semigroups. (Russian) **82h:20101**
 Reutenauer, Christophe Sur mon article: "Une topologie du monoïde libre" [Semigroup Forum 18 (1979), no. 1, 33-49; MR 80j:20075]. **82b:20102**
 Sabidussi, Gert See Chaput, Daniel, **82a:20078**
 Sakarovitch, Jacques Monoides pointés. (English summary) **82i:20085**
 Sikdar, Kripasindhu On quasitransitive semigroup action. **82c:20115**
 Silberger, D. M. How many unbordered words? **82f:20098**
 Straubing, Howard A generalization of the Schützenberger product of finite monoids. **82a:20079**

secondary classifications:

- Capocelli, Renato M. ★A combinatorial property of codes having finite deciphering delay. **(82m:94041)**
 Cohn, Harvey Growth types of Fibonacci and Markoff. **(82j:10027)**
 Culik, K., II (with Karhumäki, Juhani) On the equality sets for homomorphisms on free monoids with two generators. (French summary) **(82f:68076)**
 Dang Huu Dao See Peák, István, **(82b:68077)**
 De Luca, Aldo (with Restivo, Antonio) On some properties of local testability. **(82b:68061)**
 Karhumäki, Juhani See Culik, K., II, **(82f:68076)**
 Lisovik, L. P. Equivalence problem for finitely ambiguous finite automata over semigroups. **(82b:68045)**
 Mitsch, H. Derivations on I -semigroups and formal languages. **(82g:06025)**
 Nurmeev, K. N. The complexity and running time of programs on a finite information set. (Russian) **(82c:68043)**
 Peák, István (with Dang Huu Dao) A note on the characteristic semigroups of Mealy-automata. **(82b:68077)**
 Pin, Jean-Eric (with Straubing, Howard) Remarques sur le dénombrement des variétés de monoïdes finis. (English summary) **(82k:68027)**
 Restivo, Antonio See De Luca, Aldo, **(82b:68061)**
 Reutenauer, Christophe A new characterization of the regular languages. (French and German summaries) **(82k:68045)**
 Sakarovitch, Jacques Sur une propriété d'itération des langages algébriques déterministes. (English summary) **(82f:68032)**
 Straubing, Howard See Pin, Jean-Eric, **(82k:68027)**

20M50 Connections with homological algebra and category theory

- Loganathan, M. Complementation and inner automorphism for regular semigroups. **82e:20081**
 Cohomology of inverse semigroups. **82i:20086**
 Nies, William R. Categorical extension theory of monoids. (See **82j:20120**)

secondary classifications:

- Cheng, Charles Ching An (with Shapiro, Jay) Cohomological dimension of an abelian monoid. **(82d:18018)**
 Shapiro, Jay See Cheng, Charles Ching An, **(82d:18018)**
 Urastae, D. D. Injective objects in the category of rigid commutative bands of algebras. (Russian) **(82j:06020)**

20M99 None of the above, but in this section

- Baibedat, André γ -demi-groupes, demi-modules, produits demi-directs. **82m:20072**
 Dubreil, Paul Apparition et premiers développements de la théorie des demi-groupes en France. (See **81a:20004**)
 Ježek, Jaroslav (with Kepka, Tomáš) Semigroup representations of medial groupoids. **82k:20109**
 Kepka, Tomáš See Ježek, Jaroslav, **82k:20109**
 Le Rest, Evelyne (with Le Rest, Michel) Une représentation fidèle des groupes d'un

- monoïde de relations binaires sur un ensemble fini. **82c:20116**
Le Rest, Michel See **Le Rest, Evlyne**, **82c:20116**
Pucha, Mohan S. Linear algebraic semigroups. **82g:20108**
Shoji, Kunitaka Injective hulls of certain right reductive semigroups as right S -systems. **82c:20082a**
 Right self-injective semigroups are absolutely closed. **82c:20082b**
Tamura, Takayuki Homomorphisms of free E - n algebraic systems. **82k:20110**
Tichy, Robert F. Polynomial functions over finite monoids. **82h:20085**
 A remark on polynomial functions over finite monoids. **82h:20086**

secondary classifications:

- da Costa Reis, M. Raquel P.** Partial residuals in groupoid lattices. III. **(82m:20034)**
Georgieva, N. V. A theorem on the normal form of some recursive elements and mappings. (Russian) **(82k:06020)**
John, David Identities and left cancellation in distributively generated near-rings. **(82h:16028)**
Kolotov, A. T. Algebras and semigroups with quadratic growth functions. (Russian) **(82k:16033)**
Lex, W. Beziehungen zwischen Rechtstranslationen eines Gruppoids (G, \cdot) und den Endomorphismen des Aktes ${}_cG$. **(82m:20062)**
Szendrei, Mária B. On closed sets of term functions on bands. **(82g:08008)**

20Nxx Other generalizations of groups

secondary classifications:

- (Šelehov, A. M.)** See **Webs and quasigroups**, **(82k:53003)**
Webs and quasigroups ★Ткань и квазигруппы. (Russian) [Webs and quasigroups] **(82k:53003)**

20N05 Loops, quasigroups [See also 05Bxx.]

- Beg, Afzal** On LC -, RC -, and C -loops. **82c:20083**
Bénéteau, Lucien (with Lacaze, Jacqueline) Groupes d'automorphismes des boucles de Moufang commutatives. (English summary) **82c:20117**
 Free commutative Moufang loops and anticommutative graded rings. **82c:20118**
 Ordre minimum des boucles de Moufang commutatives de classe 2 [resp. 3]. (English summary) **82j:20129**
Bonetti, Flavio (with Lunardon, Guglielmo; Strambach, Karl) Permutation loops. (Italian. English summary) **82k:20111**
Burn, R. P. Finite Bol loops. II. **82g:20109**
Copeland, Arthur H., Jr. (with Shar, Albert O.) Constructing loops from groups. **82f:20099**
Gorinčoi, P. V. Varieties of nilpotent TS-loops. (Russian) **82g:20110**
Jachanová, Jaroslava Halfnets and partial \mathfrak{J} -loops. (Czech and Russian summaries) **82b:20103**
Johnson, K. W. (with Sharma, Bhagirath Lal) Constructions of weak inverse property loops. **82c:20084**
Kanevskii, D. S. Morphisms of carcasses and of groups connected with cubic surfaces. (Russian) **82a:20080**
Kepka, Tomáš (with Němec, Petr) Distributive groupoids and the finite basis property. **82f:20100**
Kozioł, Krzysztof The extensions of commutative Moufang loops of period 3. (Polish summary) **82c:20119**
Lacaze, Jacqueline See **Bénéteau, Lucien**, **82c:20117**
Lindner, C. C. (with Mendelsohn, N. S.; Sun, S. R.) On the construction of Schroeder quasigroups. **82b:20104**
Lunardon, Guglielmo See **Bonetti, Flavio**; et al., **82k:20111**
Mendelsohn, N. S. See **Lindner, C. C.**; et al., **82b:20104**
Mushtaq, Quaiser (with Yusuf, S. M.) On locally associative LA-semigroups. **82a:20081**
Nadja, Gh. S. Note on formal commutative Moufang loops. (Romanian. French summary) **82c:20120**
Naik, N. (with Swamy, B. L. N.) Ideal theory in lattice ordered commutative Moufang loops. **82h:20087**
Němec, Petr See **Kepka, Tomáš**, **82f:20100**
Niederreiter, Harald (with Robinson, Karl H.) Bol loops of order pq . **82c:20121**
Pelling, M. J. (with Rogers, D. G.) Some $(2, n)$ combinatorial Stein groupoids. **82f:20101**
Pereira da Silva, Clóvis What are quasigroups? (Portuguese) **82b:20105**
Prodan, N. I. On a variety of CHQ-algebras. (Russian) **82k:20112**
Radnev, Petko Loops which admit only one linear order. (Bulgarian. Russian and English summaries) **82f:20102**
Robinson, D. A. The Bryant-Schneider group of a loop. **82c:20122**
Robinson, Karl H. See **Niederreiter, Harald**, **82c:20121**
Rogers, D. G. See **Pelling, M. J.**, **82f:20101**
Shar, Albert O. See **Copeland, Arthur H., Jr.**, **82f:20099**
Sharma, Bhagirath Lal See **Johnson, K. W.**, **82c:20084** and **Solarin, A. R. T.**, **82g:20111**
Smith, Jonathan D. H. Exterior algebra representations of commutative Moufang loops. **82b:20106**
Solarin, A. R. T. (with Sharma, Bhagirath Lal) On the construction of Bol loops. **82g:20111**
Stojaković, Zoran (with Ušan, Janez) On a maximal system of functional equations on quasigroups. (Serbo-Croatian summary) **82b:20107**
Strambach, Karl See **Bonetti, Flavio**; et al., **82k:20111**
Sun, S. R. See **Lindner, C. C.**; et al., **82b:20104**
Swamy, B. L. N. See **Naik, N.**, **82h:20087**
Ušan, Janez See **Stojaković, Zoran**, **82b:20107**
Yusuf, S. M. See **Mushtaq, Quaiser**, **82a:20081**

secondary classifications:

- Akivis, M. A.** The integration of the structure equations of a Moufang three-web of

minimal dimension. (Russian) **(82j:53027)**

A class of three-webs that are determined by a triple of hypersurfaces. (Russian) **(82c:53014)**

- Das, Phulendu** Topological quasigroups. **(82c:22008)**
Dudek, Józef Some remarks on distributive groupoids. **(82k:20095)**
Hamada, Noboru The geometric structure and the p -rank of an affine triple system derived from a nonassociative Moufang loop with the maximum associative center. **(82k:05021)**
Kannappan, P. (with Sathyabhama, V.) On the generalized "extra" functional equation. **(82a:39005)**
Kerdman, F. S. Analytic Moufang loops in the large. (Russian) **(82c:22006)**
 The Schreier theorem for analytic Moufang loops. (Russian) **(82d:22006)**
Korchmáros, Gábor-Gabriele (with Marchi, Mario) Loops with partitions and André structures. (Italian. English summary) **(82i:51002)**
Marchi, Mario See **Korchmáros, Gábor-Gabriele**, **(82i:51002)**
Misra, S. S. See **Naik, N.**; et al., **(82a:06033)**
Mullin, R. C. On an extension of the Moore-Sade construction for combinatorial configurations. **(82d:05034)**
Naik, N. (with Swamy, B. L. N.; Misra, S. S.) Lattice-ordered commutative loops. **(82a:06033)**
Natale, Elvira Medial idempotent commutative n -quasigroups. (Italian. English summary) **(82a:20083)**
Sathyabhama, V. See **Kannappan, P.**, **(82a:39005)**
Šelehov, A. M. Three-webs with a partially symmetric curvature tensor. (Russian) **(82k:53032)**
Surla, Dušan See **Ušan, Janez**; et al., **(82d:05036)**
Swamy, B. L. N. See **Naik, N.**; et al., **(82a:06033)**
Swinnerton-Dyer, H. P. F. Universal equivalence for cubic surfaces over finite and local fields. **(82k:14019)**
Tošić, Ratko See **Ušan, Janez**; et al., **(82d:05036)**
Ušan, Janez (with Tolić, Ratko; Surla, Dušan) A method for constructing a system of orthogonal Latin squares, codes and k -seminets. (Russian. Serbo-Croatian summary) **(82d:05036)**

20N07 Mappings of loops

secondary classifications:

- Johnson, K. W.** Transversals, S -rings and centraliser rings of groups. **(82f:20010)**

20N10 Ternary systems (heaps, semiheaps, heapoids, etc.)

- Feizullaev, R. B.** See **Mustafaev, L. G.**, **82b:20108**
Mustafaev, L. G. (with Feizullaev, R. B.) Semiheaps and semigroups of linear continuous mappings. (Russian) **82b:20108**
 secondary classifications:

- Feizullaev, R. B.** Ternary semigroups of locally homeomorphic mappings. (Russian) **(82j:54087)**
Lizzio, Angelo General ternary systems and involutory perspectivities in translation planes. (Italian) **(82i:51004)**

20N15 n -ary systems

- Dudek, Wiesław A.** Remarks on n -groups. **82d:20062**
 On divisibility in n -semigroups. **82c:20085**
Länger, Helmut Commutative quasitrivial supers associative systems. **82a:20082**
Natale, Elvira Medial idempotent commutative n -quasigroups. (Italian. English summary) **82a:20083**
Slipenko, A. K. Structure of right n -groups. (Russian) **82a:20084**
Taylor, John G. Generalized groups as global or local symmetries. **82b:20109**
Wanke-Jakubowska, M. B. (with Wanke-Jerie, M. E.) Erratum to the paper: "On orders of skew elements in finite n -groups" [Demonstratio Math. **12** (1979), no. 1, 247–253; MR **80b:20111**]. **82i:20087**
Wanke-Jerie, M. E. See **Wanke-Jakubowska, M. B.**, **82i:20087**

secondary classifications:

- Ismailov, F. A.** Polyadic semigroups of linear mappings. (Russian. Azerbaijani and English summaries) **(82k:20106)**

20N99 None of the above, but in this section

- Lee, Sin Min** On a class of simple nonassociative groupoid rings. **82a:20085**
Stojaković, Zoran (with Ušan, Janez) A classification of finite partial quasigroups. (Serbo-Croatian summary) **82j:20131**
 See also **Ušan, Janez**, **82j:20130**
Ušan, Janez (with Stojaković, Zoran) D -complete orthogonal systems of partial quasigroups. (Russian. Serbo-Croatian summary) **82j:20130**
 See also **Stojaković, Zoran**, **82j:20131**

secondary classifications:

- Chen, Zhong Mu** Full power groups— Z_m -factorizable groups. (Chinese) **(82j:20067)**
Chinda, K. P. (with Day, Jane M.) The structure of hemigroups. **(82m:22006)**
Day, Jane M. See **Chinda, K. P.**, **(82m:22006)**
Fauknerová, Jarmila A note on the finite extensivity property. **(82c:08010)**
Fichtner, Konrad On groupoids in crystallography. **(82d:20045)**
Harrison, D. K. Nonnormal Galois theories and some resulting structures. **(82m:13005)**
Micale, Biagio The nucleus and the center of a distributive Ω -group. (Italian) **(82e:17004)**

- Ostapenko, V. V. See Kozierackaja, L. N., 82c:22001
 Polećki, V. M. Primary layer-compact topological groups. (Russian. English summary) 82c:22002
 Prodanov, Iv. Maximal and minimal topologies on abelian groups. 82c:22003
 Protasov, I. V. Topological properties of the lattice of subgroups. (Russian) 82c:22003
 Topologies in a lattice of subgroups. (Russian. English summary) 82g:22003
 Schwanengel, U. See Eberhardt, V.; et al., 82d:22002
 Stojanov, L. N. Some minimal abelian groups are precompact. 82i:22004

secondary classifications:

- Dence, Thomas P. A Lebesgue decomposition for elements in a topological group. (82c:28015)
 D'Este, Gabriella The Θ -topology on abelian p -groups. (82a:20062)
 Effros, Edward G. (with Shen, Chao Liang) Dimension groups and finite difference equations. (82k:46088)
 Gramellini, Maria Letizia (with Tozzi, Anna) Final topological groups and coreflections. (Italian summary) (82i:18002)
 Shen, Chao Liang See Effros, Edward G., (82k:46088)
 Tozzi, Anna See Gramellini, Maria Letizia, (82i:18002)

22A10 Analysis on general topological groups

- Boseck, Helmut (with Rudolph, Klaus-Peter) An axiomatic approach to differentiability on topological groups. 82h:22001
 Engle, Jessie Ann Haar measure on a left-continuous group. 82c:22004
 Hudaberdiev, V. N. A theorem of Banach-Steinhaus type and duality for continuous representations of topological groups. (Russian) 82d:22003
 Ludwig, Klaus Eigenschaften topologischer Gruppen von Lie-Reihen. [Characteristics of topological groups of Lie series] 82k:22001
 Rudolph, Klaus-Peter See Boseck, Helmut, 82h:22001
 Sander, Wolfgang Ein Beitrag zur Baire-Kategorie-Theorie. (English summary) 82e:22004

secondary classifications:

- Bożejko, Marek Some aspects of harmonic analysis on free groups. (82e:43006)
 Kumar, Ajay (with Singh, Ajit Iqbal) Spectral synthesis in products and quotients of hypergroups. (82h:43005)
 Nakano, Hidegoro Double integral theorem of Haar measures. (82c:28015)
 Ragimov, M. B. On the spectral theory of an infinite number of closed commuting linear operators. (Russian. Azerbaijani and English summaries) (82f:47009)
 Rudolph, Klaus-Peter Michal-Bastiani differentiability on topological groups. (82i:58016)
 Singh, Ajit Iqbal See Kumar, Ajay, (82h:43005)
 Vrem, Richard C. Continuous measures and lacunarity on hypergroups. (82m:43013)

22A15 Structure of topological semigroups

- Chae, Younki Almost pointwise periodic semigroups. 82h:22002
 DeVin, E. D. Semigroups with $[x][y]=[y][x]$. 82c:22005
 Dobbins, Greg On the intersection of the maximal ideals. 82m:22003
 Madison, Bernard L. Quotients of locally compact semigroups. 82i:22005
 Olejček, Vladimir (with Šipoš, Ján) On recurrent functions. 82i:22006
 Plaumann, Peter (with Strambach, Karl) Die lokal kompakten Halbgruppen und Ringe von Pollák-Rédeischen Typus. 82c:22005
 Pop, Maria S. On the boundary in topological n -semigroups. 82c:22002
 Ruppert, Wolfgang On compact locally connected semigroups with identity. 82c:22006
 Semitopological monoids defined on compact connected 3-manifolds. 82d:22004
 No semitopological monoid can be defined on the closure of $\{(x, \sin 1/x) : x \in \mathbb{R}/(0)\}$. 82m:22004
 Šipoš, Ján See Olejček, Vladimir, 82i:22006
 Strambach, Karl See Plaumann, Peter, 82c:22005

secondary classifications:

- Chinda, K. P. (with Day, Jane M.) The structure of hemigroups. (82m:22006)
 Day, Jane M. See Chinda, K. P., (82m:22006)
 Drbohlav, Karel Remarks on tolerance semigroups. (82e:20078)
 Friedberg, Michael Almost-periodic functions, compactifications, and faces of finite-dimensional cones. (82k:43007)
 Sikdar, Kripasindhu On quasitransitive semigroup action. (82c:20115)
 Troallie, Jean-Pierre Une approche nouvelle de la presque-périodicité faible. (82f:43009)

22A20 Analysis on topological semigroups

- Dzinotiyewi, Heneri A. M. Continuity of semigroup actions on normed linear spaces. 82a:22001
 Helmer, Dietrich Joint continuity of affine semigroup actions. 82a:22002
 Jungheun, H. D. (with Lerner, B. T.) Semigroup compactifications of semidirect products. 82k:22003
 Kinzi, Franz Convolutions of probability measures on semigroups. 82c:22007
 Lerner, B. T. See Jungheun, H. D., 82k:22003

secondary classifications:

- Hulanicki, Andrzej A class of convolution semigroups of measures on a Lie group. (82g:43004)
 Janssen, Arnold Integration separat stetiger Funktionen. (English summary) (82g:28020)
 Johnson, David L. (with Lahr, Charles D.) Multipliers of L^1 -algebras with order convolution. (82k:43004)
 Jungheun, H. D. Topological left amenability of semidirect products. (82g:43002)
 Lahr, Charles D. See Johnson, David L., (82k:43004)

- Šmarda, Bohumil Ideal systems of intersection and product type. (82b:06021)

20P05 Probability methods in group theory

22-XX TOPOLOGICAL GROUPS, LIE GROUPS (For transformation groups, see 54H15, 57Sxx, 58-XX. For abstract harmonic analysis, see 43-XX.)

22-01 Elementary exposition, textbooks

- Oniščik, A. L. ★ Введение в теорию групп и алгебры Ли. (Russian) [Introduction to the theory of Lie groups and Lie algebras] 82d:22001

secondary classifications:

- Dreseler, Bernd See Schempp, Walter, (82m:43001)
 Schempp, Walter (with Dreseler, Bernd) ★ Einführung in die harmonische Analyse. (German) [Introduction to harmonic analysis] (82m:43001)

22-02 Advanced exposition (research surveys, monographs, etc.)

- Želobenko, D. P. Harmonic analysis on reductive Lie groups. (Russian) 82c:22001

22-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Borel, A. On the development of Lie group theory. (82b:01028)
 (Margulis, G. A.) See Tits, Jacques, (82g:01075)
 Tits, Jacques The work of Gregori Aleksandrovich Margulis. (82g:01075)

22-04 Explicit machine computation and programs (not the theory of computation or programming)

22-06 Proceedings, conferences, etc.

- (Carmona, Jacques) See Noncommutative harmonic analysis and Lie groups, 82m:22001
 (Vergne, Michèle) See Noncommutative harmonic analysis and Lie groups, 82m:22001
 Colloquium:

- Noncommutative Harmonic Analysis ★ Noncommutative harmonic analysis and Lie groups. 82m:22001
 Marseille ★ Noncommutative harmonic analysis and Lie groups. 82m:22001
 Noncommutative harmonic analysis and Lie groups ★ Noncommutative harmonic analysis and Lie groups. 82m:22001

secondary classifications:

- (Horwitz, L. P.) See Group theoretical methods in physics, (82h:81004)
 (Ne'eman, Yuval) See Group theoretical methods in physics, (82h:81004)
 Colloquium:
 Group Theoretical Methods in Physics ★ Group theoretical methods in physics. (82h:81004)
 Group theoretical methods in physics ★ Group theoretical methods in physics. (82h:81004)
 Kiryat Anavim ★ Group theoretical methods in physics. (82h:81004)
 Physics ★ Group theoretical methods in physics. (82h:81004)

22Axx Topological algebraic systems (For topological rings and fields, see 12Jxx, 13Jxx, 16A80; for dual spaces of operator algebras and topological groups, see 47D35.)

22A05 Structure of general topological groups

- Akmalov, N. A. Topologies in the tensor product of abelian groups. (Russian) 82h:22001
 Completeness of topological groups of the class $S(\varphi, b, E)$. (Russian) 82j:22001
 Atkin, C. J. Monodromy in local groups. 82c:22002
 Chuan, Jen Chung (with Liu, Li) Group topologies on the real line. 82g:22001
 Dierolf, Susanne See Eberhardt, V.; et al., 82d:22002
 van Douwen, Eric K. The product of two countably compact topological groups. 82h:22002
 Eberhardt, V. (with Dierolf, Susanne; Schwanengel, U.) On the product of two (totally) minimal topological groups and the three-space problem. 82d:22002
 Grant, Douglas L. Arbitrary powers of the roots of unity are minimal Hausdorff topological groups. 82i:22001
 Guran, I. I. Topology of an infinite symmetric group and condensations. (Russian) 82m:22002
 Topological groups similar to Lindelöf groups. (Russian) 82g:22002
 Kozierackaja, L. N. (with Ostapenko, V. V.) Topological nilgroups of matrices. (Russian) 82c:22001
 Liu, Li See Chuan, Jen Chung, 82g:22001
 Mirković, Branislav An application of homological methods to locally convex groups. 82i:22002a
 Errata: "An application of homological methods to locally convex groups". 82i:22002b
 Moskalenko, Z. I. On automorphism groups of compact totally disconnected nilpotent groups. (Russian) 82c:22003
 Nickolas, Peter A Kurosh subgroup theorem for topological groups. 82j:22002

- Milnes, Paul On vector-valued weakly almost periodic functions. (82i:43007)
 Stetjen, Gérard L. G. The dual of the space of measures with continuous translations. (82b:43007)
 Troulic, Jean-Pierre Une approche nouvelle de la presque-périodicité faible. (82f:43009)

22A25 Representations of general topological groups and semigroups

- Das, Pinakendu Topological quasigroups. 82e:22008
 Kerdman, F. S. Analytic Moufang loops in the large. (Russian) 82d:22005
 Ruppert, Wolfgang A remark on compact semilattices of groups. 82m:22005
 Segal, Graeme Unitary representations of some infinite-dimensional groups. 82k:22004

secondary classifications:

- Combe, Ph. (with Heegh-Krohn, Raphael; Rodriguez, R.; Sirugue, M.; Sirugue-Collin, M.) Poisson processes on groups and Feynman path integrals. (82c:81040)
 Heegh-Krohn, Raphael See Combe, Ph.; et al., (82c:81040)
 Ismagilov, R. S. Imbedding of a group of measure-preserving diffeomorphisms into a semidirect product and its unitary representations. (Russian) (82b:22027)
 Rodriguez, R. See Combe, Ph.; et al., (82c:81040)
 Sirugue, M. See Combe, Ph.; et al., (82c:81040)
 Sirugue-Collin, M. See Combe, Ph.; et al., (82c:81040)

22A26 Topological semilattices, lattices and applications [See also 06B30, 06F30.]

secondary classifications:

- Ball, Richard N. Topological lattice-ordered groups. (82b:06021)
 Erné, Marcel Order-topological lattices. (82f:06010)
 Protasov, I. V. Topological properties of the lattice of subgroups. (Russian) (82c:22003)

22A30 Other topological algebraic systems and their representations

- Alkmalov, N. A. Topological groups of class $S(\nabla, bE)$ and their homomorphisms. (Russian) 82e:22009
 Chinda, K. P. Some theorem on hemigroups. 82c:22010
 Kerdman, F. S. Analytic Moufang loops in the large. (Russian) 82c:22006
 The Schreier theorem for analytic Moufang loops. (Russian) 82d:22006

secondary classifications:

- Feizullayev, R. B. See Mustafayev, L. G., (82b:20106)
 Muhin, Ju. N. Lattice isomorphisms of prosolvable groups. (Russian) (82b:20036)
 Mustafayev, L. G. (with Feizullayev, R. B.) Semiheaps and semigroups of linear continuous mappings. (Russian) (82b:20106)
 Protasov, I. V. (with Sidorčuk, A. D.) On varieties of topological algebraic systems. (Russian) (82c:00009)
 Pšenčikov, V. I. A topological analogue of a theorem of Conrad for l -groups with a basis. (Russian) (82c:06033)
 Sidorčuk, A. D. See Protasov, I. V., (82c:00009)

22A99 None of the above, but in this section

- Arahovitis, John Topological algebra representations of topological groups. 82a:22003
 Chinda, K. P. (with Day, Jane M.) The structure of hemigroups. 82m:22006
 Day, Jane M. See Chinda, K. P., 82m:22006
 Kubarski, Jan Topological Lie subgroups. 82g:22004

secondary classifications:

- Arhangel'skii, A. V. On the relations between invariants of topological groups and their subspaces. (Russian) (82c:54005)
 Zambakhidze, L. G. Relations between dimensions of free bases of free topological groups. (Russian. Georgian and English summaries) (82d:54058)

22Bxx Locally compact abelian (LCA) groups

22B05 General properties and structure of LCA groups

- Kabanjuk, M. I. Dense subgroups of locally compact abelian groups. (Russian) 82b:22003
 Khan, M. Ahmad Chain conditions on subgroups of LCA groups. 82b:22004
 When are proper subgroups of LCA groups contained in maximal ones? 82m:22007
 Morris, Sidney A. ★Двойственность Понтрягина и строение локально компактных абелевых групп. (Russian) [Pontrjagin duality and the structure of locally compact abelian groups] 82c:22007
 (Onitskii, A. L.) See Morris, Sidney A., 82c:22007
 Protasov, I. V. Order-convergence in the lattice of subgroups of a topological group. (Russian) 82c:22008

22B10 Structure of group algebras of LCA groups

22B99 None of the above, but in this section

- Krjúčkov, N. I. On the theory of abelian extensions of locally compact abelian groups. (Russian) 82b:22003

secondary classifications:

- Bloom, Walter R. Multipliers of Lipschitz spaces on zero-dimensional groups. (82j:43003)

22C05 Compact groups

- Dambus, Ture On the existence of real Clebsch-Gordan coefficients. 82b:22005
 Đoković, Dragomir Ž. Point-sequences on spheres and the Spin groups. 82f:22001
 van Douwen, Eric K. Homogeneity of βG if G is a topological group. 82a:22004
 Fischler, Mark Young-tableau methods for Kronecker products of representations of the classical groups. 82j:22003
 Flöschner, Karl Ein Algorithmus zur Berechnung der Vielfachheiten von Gewichten. (English summary) 82j:22004
 Jasselette, P. Extension of Kramers' symbolic method to $SU(4)$. 82a:22005
 Morris, Sidney A. On somewhat divisible groups. 82m:22008
 Pospelov, A. S. Orthonormal systems generated by representations of a class of compact groups. (Russian) 82c:22011
 Ruppert, Wolfgang On semitopological compactifications of nonabelian groups. 82d:22007

secondary classifications:

- Cahn, Robert S. (with Taylor, Michael E.) Asymptotic behavior of multiplicities of representations of compact groups. (82d:22013)
 Đoković, Dragomir Ž. (with Malzan, Jerry) Perturbation of eigenvalues in $U(n)$ by pseudoreflections. (82a:15007)
 Eguchi, Masaaki (with Kumahara, Keisaku) Fourier transforms and elementary solutions of invariant differential operators on homogeneous vector bundles over compact homogeneous spaces. (82j:58114)
 Kumahara, Keisaku See Eguchi, Masaaki, (82j:58114)
 Malzan, Jerry See Đoković, Dragomir Ž., (82a:15007)
 Taylor, Michael E. See Cahn, Robert S., (82d:22013)

22Dxx Locally compact groups and their algebras

22D05 General properties and structure of locally compact groups

- Johnson, David L. Translation-invariant linear forms on $D(G)$. 82f:22002
 Komarov, Ju. A. (with Protasov, I. V.) Compactness and discreteness in the lattice of invariant subgroups of a topological group. (Russian) 82f:22003
 (with Protasov, I. V.) Compactness in the lattice of subgroups of a topological group. (Russian) 82m:22009
 Muhin, Ju. N. Non-zero-dimensional groups all of whose nonnilpotent subgroups are invariant. (Russian) 82f:22004
 Pichaud, Joëlle Homologie continue et homologie différentiable des groupes localement compacts. (English summary) [Continuous homology and differentiable homology of locally compact groups] 82k:22005
 Protasov, I. V. See Komarov, Ju. A., 82f:22003 and 82m:22009
 Sariev, A. Compactness of the E' -topology of the lattice of subgroups of a topological group. (Russian. Turkmen summary) 82b:22004
 Schochet, Claude (with Schreiber, Bertram) Open centralizers and the continuity of group representations. 82f:22005
 Schreiber, Bertram See Schochet, Claude, 82f:22005
 Staruhina, E. N. Strongly coatomic topological groups. (Russian) 82d:22008
 Stevens, T. Christine Non-(CA) analytic groups and groups of rotations. 82j:22005

secondary classifications:

- Aida, Václav On Segal's postulates for general quantum mechanics. (82b:81006)
 Henrichs, Rolf Wim On one-sided harmonic analysis. (82e:43003)
 Hoffmann, Burkhard Locally Dugundji spaces and quotient spaces of locally compact groups. (82g:54031)
 Protasov, I. V. Topologies in a lattice of subgroups. (Russian. English summary) (82g:22003)
 Rothman, Sheldon The von Neumann kernel and minimally almost periodic groups. (82g:22008)
 Toruńczyk, Henryk No infinite-dimensional locally compact ANR is a topological group. (82a:57014)
 Woess, Wolfgang Aperiodische Wahrscheinlichkeitsmaße auf topologischen Gruppen. (English summary) (82b:60006)

22D10 Unitary representations of locally compact groups

- Barnes, Bruce A. The role of minimal idempotents in the representation theory of locally compact groups. 82i:22007
 Fakler, Robert A. Representations induced from conjugate subgroups. 82c:22012
 Green, Philip Square-integrable representations and the dual topology. 82g:22005
 Nguyễn Hữu Anh (with Vu'o'ng Manh So'n) On square integrable factor representations of locally compact groups. 82i:22008
 Nouyrigat, Paul Sur les points extrémaux de la boule unité de l'espace des coefficients d'une représentation unitaire et sur l'égalité $A_*(G) = B_*(G)$. 82b:22005
 Taylor, Keith F. Group representations which vanish at infinity. 82a:22006
 Vu'o'ng Manh So'n See Nguyễn Hữu Anh, 82i:22008

secondary classifications:

- Castrigiano, D. P. L. On Euclidean systems of covariance for massless particles. (82i:81066)
 Dirl, R. Clebsch-Gordan coefficients for corepresentations. I ⊗ I. (82i:81054a)
 Clebsch-Gordan coefficients for corepresentations. I ⊗ II. (82i:81054b)
 Clebsch-Gordan coefficients for corepresentations. I ⊗ III. (82i:81054c)
 Clebsch-Gordan coefficients for corepresentations. II ⊗ II. (82i:81054d)
 Clebsch-Gordan coefficients for corepresentations. II ⊗ III. (82i:81054e)
 Clebsch-Gordan coefficients for corepresentations. III ⊗ III. (82i:81054f)
 Guichardet, Alain Représentations de G^X (G compact) selon Verchik-Gelfand-Graiev et

- Ismagilov. (82c:22033)
 Nielsen, Ole A. ★ Direct integral theory. (82c:46061)

22D12 Other representations of locally compact groups

- Castrigiano, D. P. L. (with Mutze, U.) On the irreducible representations of groups containing a subgroup of finite index. (82j:22006)
 Hoogland, Henk On projective bundle representations and gauge equivalence. (See 82h:81004)
 Mutze, U. See Castrigiano, D. P. L., 82j:22006
 Shin'ya, Hitoshi Irreducible Banach representations of locally compact groups of a certain type. (82c:22009)

secondary classifications:

- Giacovazzo, Carmelo Progress in representations theory. The concept of generalized representations. (82b:81039a)
 The estimation of the one-phase structure seminvariants of first rank by means of their generalized second representations. (82b:81039b)
 Giovannini, N. Superselection variables and generalized multipliers. (82i:81012)
 Pichaud, Joëlle Homologie continue et homologie différentiable des groupes localement compacts. (English summary) [Continuous homology and differentiable homology of locally compact groups] (82k:22005)
 Segal, I. E. Decay processes and the quantization of nonunitarizable representations of causal groups. (See 82h:81004)
 Zink, Ernst-Wilhelm Weil-Darstellungen und lokale Galoistheorie. (82g:12016)

22D15 Group algebras of locally compact groups

- Hulanicki, Andrzej Invariant subsets of nonsynthesis Leptin algebras and nonsymmetry. (82i:22009)
 Rao, M. M. Convolutions of vector fields. I. (82b:22006)
 Schlichting, G. Polynomidentitäten und Darstellungen von Gruppen. (English summary) (82g:22006)

secondary classifications:

- Ho, Ch'ing Jen Approximate identities in $D_p S(G)$. (82g:43005c)
 Schlichting, G. Operationen mit periodischen Stabilisatoren. (82m:20007)
 Weit, Yitzhak On the one-sided Wiener's theorem for the motion group. (82g:43007a)
 On closed ideals in the motion group algebra. (82g:43007b)

22D20 Representations of group algebras

secondary classifications:

- Rao, M. M. Convolutions of vector fields. I. (82b:22006)

22D25 C^* -algebras and W^* -algebras arising from group representations [See also 46Lxx.]

- Anantharaman-Delaroche, C. Action moyennable d'un groupe localement compact sur une algèbre de von Neumann. (English summary) (82f:22006)
 Choda, Marie The factors of inner amenable groups. (82d:22009)
 Iório, Valéria de Magalhães Hopf C^* -algebras and locally compact groups. (82b:22007)
 Paschke, William L. (with Salinas, Norberto) C^* -algebras associated with free products of groups. (82c:22010)
 Salinas, Norberto See Paschke, William L., 82c:22010
 Watatani, Yasuo Haagerup's multiplications on group C^* -algebras. (82b:22008)

secondary classifications:

- Barnes, Bruce A. The role of minimal idempotents in the representation theory of locally compact groups. (82i:22007)
 De Cannière, Jean (with Enock, Michel; Schwartz, Jean-Marie) Sur deux résultats d'analyse harmonique non-commutative: une application de la théorie des algèbres de Kac. (82b:46090)
 Enock, Michel See De Cannière, Jean; et al., (82b:46090)
 Landstad, Magnus B. Algebras of spherical functions associated with covariant systems over a compact group. (82i:46102)
 Nguyễn Hữu Anh (with Vu'o'ng Manh So'n) On square integrable factor representations of locally compact groups. (82i:22008)
 Palmer, John Complex structures and external fields. (82h:81078)
 Renault, Jean ★ A groupoid approach to C^* -algebras. (82b:46075)
 Rothman, Sheldon (with Strassberg, Helen) The algebraic von Neumann kernel and linear algebraic groups. (82d:20040)
 Rousseau, Ronny Crossed products of von Neumann algebras and semidirect products of groups. (82i:46103)
 Schwartz, Jean-Marie See De Cannière, Jean; et al., (82b:46090)
 Širokov, Ju. M. Unified treatment of the classical and quantum mechanics. (See 82b:81004b)
 Strassberg, Helen See Rothman, Sheldon, (82d:20040)
 Voiculescu, Dan Remarks on the singular extension in the C^* -algebra of the Heisenberg group. (82m:46075)
 Vu'o'ng Manh So'n See Nguyễn Hữu Anh, (82i:22008)
 Williams, Dana P. The topology on the primitive ideal space of transformation group C^* -algebras and C.C.R. transformation group C^* -algebras. (82h:46081)
 Woronowicz, S. L. Pseudospaces, pseudogroups and Pontryagin duality. (82c:46079)

22D30 Induced representations

- Mihalov, E. N. Duality in categories of topological groups. (Russian) (82c:22013)

- Sato, Yoshiyuki On infinite-dimensional unitary representations of certain discrete groups. (82i:22010)

secondary classifications:

- Biedenharn, L. C. See Truini, P.; et al., (82h:81056)
 Cassinelli, G. See Truini, P.; et al., (82h:81056)
 Castrigiano, D. P. L. (with Mutze, U.) On the irreducible representations of groups containing a subgroup of finite index. (82j:22006)
 Chao, Wen Min Fourier inversion and Plancherel formula for $Sp(n, \mathbb{R})$. (82j:22014)
 Farmer, Thomas A. Irreducibility of certain degenerate principal series representations of $Sp(n, \mathbb{R})$. (82j:22015)
 Gelbart, Stephen (with Knapp, A. W.) Irreducible constituents of principal series of $SL_2(k)$. (82j:22018)
 Goldin, Gerald A. (with Menikoff, Ralph; Sharp, David H.) Particle statistics from induced representations of a local current group. (82h:81064)
 Knapp, A. W. See Gelbart, Stephen, (82j:22018)
 Menikoff, Ralph See Goldin, Gerald A.; et al., (82h:81064)
 Mutze, U. See Castrigiano, D. P. L., (82j:22006)
 Nielsen, Ole A. The failure of the topological Frobenius property for nilpotent Lie groups. (82a:22009)
 Rousseau, Ronny Crossed products of von Neumann algebras and semidirect products of groups. (82i:46103)
 Sharp, David H. See Goldin, Gerald A.; et al., (82h:81064)
 Shin'ya, Hitoshi Irreducible Banach representations of locally compact groups of a certain type. (82c:22009)
 Takesaki, Masamichi Fourier analysis of compact automorphism groups. (French summary) (82a:46076)
 Truini, P. (with Biedenharn, L. C.; Cassinelli, G.) Imprimitivity theorem and quaternionic quantum mechanics. (82h:81056)

22D35 Duality theorems

- De Cannière, Jean An illustration of the noncommutative duality theory for locally compact groups. (82k:22006)
 Ikeshoji, Kiyoshi (with Mitoma, Itaru; Okazaki, Yoshiaki) The Eberlein theorem on noncommutative locally compact groups. (82i:22014a)
 (with Okazaki, Yoshiaki) Pontryagin duality for nonabelian locally compact groups. (82i:22014b)
 McKennon, Kelly The complexification and differential structure of a locally compact group. (82k:22007)
 Mitoma, Itaru See Ikeshoji, Kiyoshi; et al., 82i:22014a
 Okazaki, Yoshiaki See Ikeshoji, Kiyoshi; et al., 82i:22014a
 Picardello, Massimo A. Locally compact unimodular groups with atomic duals. (Italian summary) (82c:22015)
 Tatsumi, Nobuhiko Duality for normal subgroup. (French summary) (82b:22009)

secondary classifications:

- Adamczyk, A. (with Rączka, Ryszard) New relativistic wave equations associated with indecomposable representations of the Poincaré group. (82k:81037)
 Butzmann, H.-P. Duality theory for abelian convergence groups. (82b:54003)
 De Cannière, Jean Produit croisé d'une algèbre de Kac par un groupe localement compact. (English summary) (82a:46070)
 Enomoto, Masatoshi (with Watatani, Yasuo) Young diagrams and C^* -algebras. (82i:46064)
 Haueschild, Wilfried Subhypergroups and normal subgroups. (82b:43004)
 Kishimoto, Akitaka Simple crossed products of C^* -algebras by locally compact abelian groups. (82g:46110)
 Polley, L. On infinite direct products of Lorentz transformations. (82b:81046)
 Rączka, Ryszard See Adamczyk, A., (82k:81037)
 Takesaki, Masamichi Noncommutative group duality and the Kubo-Martin-Schwinger condition. (82h:82013)
 Watatani, Yasuo See Enomoto, Masatoshi, (82i:46064)

22D40 Ergodic theory on groups [See also 28Dxx and 43A60.]

- Aoki, Nobuo A simple proof of the Bernoullicity of ergodic automorphisms on compact abelian groups. (82d:22010)
 Keynes, H. B. (with Newton, D.) Ergodicity in (G, σ) -extensions. (See 81j:58002)
 Moore, Calvin C. (with Schmidt, Klaus D.) Coboundaries and homomorphisms for nonsingular actions and a problem of H. Helson. (82a:22007)
 Newton, D. See Keynes, H. B., (See 81j:58002)
 Schmidt, Klaus D. See Moore, Calvin C., 82a:22007

secondary classifications:

- Albeverio, Sergio (with Heegh-Krohn, Raphael) Ergodic actions by compact groups on C^* -algebras. (82b:46087)
 Bezuglyi, S. I. (with Golodec, V. Ja.) Groups of transformations of a space with measure and invariants of outer conjugation for automorphisms from normalizers of complete groups of type III. (Russian) (82h:46083)
 Comes, Alain (with Weiss, Benjamin) Property T and asymptotically invariant sequences. (82c:28023b)
 Golodec, V. Ja. See Bezuglyi, S. I., (82h:46083)
 Hahn, Peter Haar measure for measure groupoids. (82a:28012)
 Heegh-Krohn, Raphael See Albeverio, Sergio, (82b:46087)
 Mundici, Daniele Ergodic undefinability in set theory and recursion theory. (82h:03057)
 Renault, Jean ★ A groupoid approach to C^* -algebras. (82b:46075)
 Safonov, A. V. On the spectral type of ergodic G -induced flows. (Russian) (82g:28025)
 Schmidt, Klaus D. Asymptotically invariant sequences and an action of $SL(2, \mathbb{Z})$ on the 2-sphere. (82c:28023a)

- Stepin, A. M. (with Tagi-Zade, A. T.) Variational characterization of topological pressure of the amenable groups of transformations. (Russian) (82a:28016)
 Tagi-Zade, A. T. See Stepin, A. M., (82a:28016)
 Weiss, Benjamin See Connes, Alain, (82e:28023b)

22D45 Automorphism groups of locally compact groups

secondary classifications:

- Enock, Michel Kac algebras & crossed products. (82a:46071)
 Schwartz, Jean-Marie Kac algebras. (82a:46073)

22D99 None of the above, but in this section

- Pichaud, Joëlle Cohomologie continue et cohomologie différentiable des groupes localement compacts. (English summary) (82b:22010)
 Zimmer, Robert J. Strong rigidity for ergodic actions of semisimple Lie groups. (82e:22011)

secondary classifications:

- Muhin, Ju. N. Lattice isomorphisms of prosolvable groups. (Russian) (82b:20036)

22Exx Lie groups [For the topology of Lie groups and homogeneous spaces, see 57Sxx, 57Ixx; for analysis thereon, see 43A80, 43A85, 43A90.]

22E05 Local Lie groups [See also 34--XX, 35--XX, 58H05.]

- Kaigorodov, V. R. (with Korjukin, V. M.) Lie groups induced by linear homogeneous geometric objects of class C^∞ . (Russian) (82e:22016)
 Korjukin, V. M. See Kaigorodov, V. R., (82e:22016)
 Mitrofanova, E. A. The group $A_{n-1}(n)$ and its representations. (Russian) (82c:22008)
 Zerling, David (CA) closures of analytic groups. (82e:22017)

secondary classifications:

- Agraev, A. A. (with Gamkrelidze, R. V.) Chronological algebras and nonstationary vector fields. (Russian) (82b:58075)
 Atkin, C. J. Monodromy in local groups. (82e:22002)
 Constantopoulos, J. P. Lie-admissible deformation of selfadjoint systems. (82g:58078)
 Gamkrelidze, R. V. See Agraev, A. A., (82b:58075)
 Hsu, Chin Shung (with Mohler, Ronald R.) On the inverse of a special class of bilinear systems. (82b:93017)
 Kiso, Kazuhiro Local properties of intransitive infinite Lie algebra sheaves. (82g:58099)
 Kobelbauer, Helmut Franz ★Stetige Iterationen und deren invariante Funktionen bei Kontraktionen des C^1 . (German) [Continuous iterations and their invariant functions in contractions of C^1] (82c:39003)
 Mohler, Ronald R. See Hsu, Chin Shung, (82b:93017)
 Reich, Ludwig (with Schwaiger, Jens) Linearisierung formal-biholomorpher Abbildungen und Iterationsprobleme. (82g:39008)
 Analytische und fraktionelle Iteration formal-biholomorpher Abbildungen und Differenzrechnung. (82c:32011)
 Schwaiger, Jens See Reich, Ludwig, (82g:39008)

22E10 General properties and structure of complex Lie groups [See also 32M05.]

- Chu, Hsin A note on the exponential map of classical Lie groups & applications to linear differential systems with periodic coefficients. (82g:22007)
 Doković, Dragomir Ž. Closures of conjugacy classes in the classical complex Lie groups. (82b:22006)
 Spitz, G. B. Classification of irreducible locally transitive linear Lie groups. (Russian) (82j:22007)

secondary classifications:

- Doković, Dragomir Ž. Closures of conjugacy classes in classical real linear Lie groups. (82b:20052)
 Kac, Victor G. Simple Lie groups and the Legendre symbol. (82f:20072)
 Moss, Kenneth N. Homology of $SL(n, \mathbb{Z}[1/p])$. (82b:20061)
 Nazarova, E. V. On the geometry of tangent bundles of Lie groups. (Russian) (82g:53042)
 Rosenberg, Alexandre Homomorphismes "abstraits" de groupes algébriques et de groupes de Lie. (English summary) (82b:20062)
 Stepashko, T. A. Geometry of forms of simplicity and semisimplicity of simple, quasimatrix and r -quasimatrix Lie groups. (Russian) (82g:53056)
 Stevens, T. Christine Non-(CA) analytic groups and groups of rotations. (82j:22005)

22E15 General properties and structure of real Lie groups

- Echarte Reula, F. J. (with Jimenez Alcon, F.) The similarity in $GL^+(n, \mathbb{R})$ in relation with their uniparametric subgroups. (82b:22011)
 Gorbachev, V. V. Decomposition of Lie groups and its applications to the study of homogeneous spaces. (Russian) (82c:22019)
 Goto, Morikuni Index of the exponential map of a semi-algebraic group. (82b:22012)
 Standard Cartan subalgebras and the automorphism group of a Lie group. (82c:22018)
 Immersions of Lie groups. (82c:22011)
 Houard, J.-C. An integral formula for cocycles of Lie groups. (82c:22024)
 Jimenez Alcon, F. See Echarte Reula, F. J., (82b:22011)
 King, Ronald Curtis Unitary group subjoinings. (82c:22020)

- Leite, Maria Luiza (with de Miatello, Isabel Dotti) A geometric property of central elements. (82b:22013)
 McCrudden, Michael On n th roots and infinitely divisible elements in a connected Lie group. (82a:22008)

de Miatello, Isabel Dotti See Leite, Maria Luiza, (82b:22013)

- Nazarjan, R. O. Decompositions of some simple Lie groups. (Russian. Armenian summary) (82e:22021)

- Rothman, Sheldon The von Neumann kernel and minimally almost periodic groups. (82g:22008)

- Stepashko, T. A. Forms of simplicity and semisimplicity of spaces with simple and quasimatrix fundamental groups. (Russian) (82c:22022)

secondary classifications:

- Baldi, P. Caractérisation des groupes de Lie connexes récurrents. [Characterisation of recurrent connected Lie groups] (82k:60019)
 Goodman, Roe Interpolation spaces and unitary representations. (82m:22010)
 Goto, Morikuni (with Uesu, Kagumi) Lie groups with left invariant metrics of nonnegative curvature. (82i:53041)
 Lai, Heng Lung (with Lue, Hwei Shyong) Scalar curvature of Lie groups. (82e:53066)
 Lue, Hwei Shyong See Lai, Heng Lung, (82e:53066)
 Milnor, John See Uesu, Kagumi, (82m:53050)
 Oniščik, A. L. ★Введение в теорию групп Ли. (Russian) [Introduction to the theory of Lie groups and Lie algebras] (82d:22001)
 Tao, Hui Min The classification up to conjugacy of compact homogeneous spaces of real semisimple Lie groups. (Chinese) (82f:53061)
 Uesu, Kagumi A note on: "Curvatures of left invariant metrics on Lie groups" [Adv. in Math. 21 (1976), no. 3, 293-329; MR 54 # 12970] by J. Milnor. (82m:53050)
 See also Goto, Morikuni, (82i:53041)
 Völklein, Helmut Transitivitätsfragen bei linearen Liegruppen. (82i:57032)
 Yokota, Ichiro Simply connected compact simple Lie group $E_{6(-78)}$ of type E_6 and its involutive automorphisms. (82e:17016)

22E20 General properties and structure of other Lie groups

- McCrudden, Michael On the n th root set of an element in a connected semisimple Lie group. (82b:22014)
 Trofimov, V. V. Imbedding of finite groups by regular elements in compact Lie groups. (Russian) (82b:22015)

secondary classifications:

- Medina Perea, Alberto ★Autour des connexions plates invariantes à gauche sur les groupes de Lie. (French) [On left-invariant flat connections on Lie groups] (82f:53047)

22E25 Nilpotent and solvable Lie groups

- du Cloux, Fokko Sur une conjecture de Guichardet. (English summary) [On a conjecture of Guichardet] (82i:22012)
 Cygan, Jacek Heat kernels for class 2 nilpotent groups. (82b:22016)
 Goodman, Roe Interpolation spaces and unitary representations. (82m:22010)
 Goodman, Sharon Symmetry properties of the zero sets of nil-theta functions. (82b:22007)
 Hulanicki, Andrzej Convolution semigroups generated by some pseudodifferential operators on Lie groups. (Italian summary) (82f:22007)
 Kaplan, Aroldo G. Riemannian nilmanifolds attached to Clifford modules. (82b:22008)
 Milovanov, M. V. Description of solvable Lie groups with a given uniform subgroup. (Russian) (82b:22017)
 Nghiêm Xuân Hải La transformation de Fourier analytique des groupes de Lie nilpotents. (82g:22009)
 Schott, René Croissance et moyennabilité des espaces homogènes. (English summary) [Growth and amenability of homogeneous spaces] (82m:22011)

secondary classifications:

- Crépel, Pierre (with Raugi, Albert) Théorème central limite sur les groupes nilpotents. (English summary) (82a:60016)
 Dadok, Jiri Solvability of invariant differential operators of principal type on certain Lie groups and symmetric spaces. (82b:43014)
 Lévy-Bruhl, Pierre Résolubilité locale d'opérateurs homogènes invariants à gauche sur des groupes de Lie nilpotents d'ordre deux. (English summary) (82b:35038)
 Liukkonen, John R. (with Mislove, Michael W.) Fourier-Stieltjes algebras of compact extensions of nilpotent groups. (82m:43008)
 Miller, Kenneth G. Parametries for hypoelliptic operators on step two nilpotent Lie groups. (82b:35040)
 Mislove, Michael W. See Liukkonen, John R., (82m:43008)
 Morley, Larry J. (with Perkel, Manley) The nilpotency class of extensions of certain p -groups. (82d:20024)
 Perkel, Manley See Morley, Larry J., (82d:20024)
 Raugi, Albert See Crépel, Pierre, (82a:60016)

22E27 Representations of nilpotent and solvable Lie groups (special orbital integrals, non-Type I representations, etc.)

- Magneron, Bernard Opérateurs d'entrelacement des représentations unitaires irréductibles des groupes de Lie nilpotents et indice de Maslov. (English summary) (82f:22008)
 Nghiêm Xuân Hải ★Construction analytique de la transformation de Fourier Plancherel des groupes de Lie. (French) [Analytic construction of the Fourier-Plancherel transform of Lie groups] (82c:22023)
 Nielsen, Ole A. The failure of the topological Frobenius property for nilpotent Lie groups. (82a:22009)

- Richardson, Leonard F. Poisson summation on Kirillov orbits. **82b:22018**
 Štěporkina, I. M. Orbit method in restriction and induction problems for a normal subgroup of a solvable Lie group. (Russian) **82m:22012**

secondary classifications:

- Brin, Michael On the spectrum of Anosov diffeomorphisms. **(82c:58077)**
 Chudnovsky, David V. (with Chudnovsky, Gregory V.) Completely X -symmetric S -matrices corresponding to theta functions. **(82c:14034)**
 Chudnovsky, Gregory V. See Chudnovsky, David V., **(82c:14034)**
 Filippakis, P. See Jannussis, A. D.; et al., **(82b:81045)**
 Hulanicki, Andrzej A Tauberian property of the convolution semigroup generated by $X^2 - |Y|^p$ on the Heisenberg group. **(82b:43012)**
 Jannussis, A. D. (with Filippakis, P.; Papaloucas, L. C.) Commutation relations and coherent states. **(82b:81045)**
 Nghiêm Xuân Hải Une variante de la conjecture de Gelfand-Kirillov et la transformation de Fourier-Plancherel. (English summary) [A variant of the Gelfand-Kirillov conjecture and the Fourier-Plancherel transform] **(82m:17004)**
 Nguyễn Hữu Anh Classification of connected unimodular Lie groups with discrete series. (French summary) **(82a:22016)**
 Papaloucas, L. C. See Jannussis, A. D.; et al., **(82b:81045)**
 Rothschild, Linda Preiss Nonexistence of optimal L^2 estimates for the boundary Laplacian operator on certain weakly pseudoconvex domains. **(82f:35060)**
 Safonov, A. V. On the spectral type of ergodic G -induced flows. (Russian) **(82g:28025)**

22E30 Analysis on real and complex Lie groups [See also 33A75, 43-XX.]

- Barbasch, Dan (with Vogan, David A., Jr.) The local structure of characters. **82c:22024**
 Campoli, Oscar A. Paley-Wiener type theorems for rank-1 semisimple Lie groups. **82i:22013**
 Chao, Wen Min Fourier inversion and Plancherel formula of Lie groups of real type $(A_1)^n$. **82h:22009**
 Cygan, Jacek Subadditivity of homogeneous norms on certain nilpotent Lie groups. **82k:22009**
 Eguchi, Masaaki (with Kumahara, Keisaku; Muta, Yōichi) A subspace of Schwartz space on motion groups. **82a:22010**
 (with Kumahara, Keisaku) Riemann-Lebesgue lemma for real reductive groups. **82c:22012**
 Fronsdal, C. (with Hirai, Takeshi) A note on a regularity of irreducible characters of a nonconnected Lie group. **82i:22014**
 Hirai, Takeshi See Fronsdal, C., **82i:22014**
 Jakobsen, Hans Plesner On singular holomorphic representations. **82c:22025**
 Johnson, Kenneth D. Paley-Wiener theorems on groups of split rank one. **82c:22013**
 Kumahara, Keisaku See Eguchi, Masaaki; et al., **82a:22010** and **82c:22012**
 Luejok, A. V. An analogue of the Paley-Wiener theorem for the groups $U(n, 1)$, $SO_0(p, 1)$. (Russian) **82f:22009**
 Malliavin, Paul C^∞ parametrix on Lie groups and two steps factorization on convolution algebras. **82h:22019**
 Mamiuda, Masaichi An analogue of the theorem of Paley-Wiener type on the universal covering group of de Sitter group. **82d:22011**
 Muta, Yōichi See Eguchi, Masaaki; et al., **82a:22010**
 Nomura, Takaaki Harmonic analysis on the universal covering group of certain semidirect product Lie group. **82i:22015**
 Sekiguchi, Jirō Eigenspaces of the Laplace-Beltrami operator on a hyperboloid. **82g:22010**
 Vakulenko, A. F. On a variant of the compactness criterion of A. Weil. (Russian. English summary) **82b:22020**
 Vogan, David A., Jr. See Barbasch, Dan, **82c:22024**

secondary classifications:

- Agranovskii, M. L. Invariant algebras of functions on homogeneous spaces of noncompact semisimple Lie groups. (Russian) **(82c:43013)**
 Anderson, Mary J. Explicit expressions for the generators of the center of the enveloping algebra of real Lie algebras and for the algebra of bivariant operators on the group. **(82j:17013)**
 Baldoni Silva, M. Welleda The embeddings of the discrete series in the principal series for semisimple Lie groups of real rank one. **(82b:22022)**
 Chang, Weita Global solvability of the Laplacians on pseudo-Riemannian symmetric spaces. **(82b:58105)**
 Cygan, Jacek Heat kernels for class 2 nilpotent groups. **(82b:22016)**
 Ebner, Leo See Hua, Luo Geng, **(82c:32032)**
 Eguchi, Masaaki (with Kumahara, Keisaku) Fourier transforms and elementary solutions of invariant differential operators on homogeneous vector bundles over compact homogeneous spaces. **(82j:58114)**
 Faraut, J. Distributions sphériques sur les espaces hyperboliques. **(82k:43009)**
 (Graev, M. I.) See Hua, Luo Geng, **(82c:32032)**
 Gutkin, E. Coefficients of Clebsch-Gordan for the holomorphic discrete series. **(82f:22013)**
 Herz, Carl Invariant distributions. **(82c:43008)**
 Hua, Luo Geng ★ Harmonic analysis of functions of several complex variables in the classical domains. **(82c:32032)**
 Hulanicki, Andrzej A Tauberian property of the convolution semigroup generated by $X^2 - |Y|^p$ on the Heisenberg group. **(82b:43012)**
 Koornwinder, Tom H. ★ Invariant differential operators on nonreductive homogeneous spaces. **(82g:43011)**
 (Korányi, Adam) See Hua, Luo Geng, **(82c:32032)**
 Kumahara, Keisaku See Eguchi, Masaaki, **(82j:58114)**
 Lévy-Bruhl, Pierre Résolubilité locale et globale d'opérateurs invariants du second ordre sur des groupes de Lie nilpotents. (English summary) **(82d:58067)**
 Résolubilité locale d'opérateurs homogènes invariants à gauche sur des groupes de

- Lie nilpotents d'ordre deux. (English summary) **(82b:35038)**
 Lohoué, Noël Estimations L^p des coefficients de représentation et opérateurs de convolution. **(82m:43004)**
 Mauceri, Giancarlo Zonal multipliers on the Heisenberg group. **(82k:43008)**
 McCrudden, Michael Factors and roots of large measures on connected Lie groups. **(82m:60014)**
 Mešterjakov, M. V. A note on dynamical systems on semisimple Lie algebras. (Russian. English summary) **(82c:58029)**
 Muta, Yōichi On the spherical functions with one-dimensional K -types and the Paley-Wiener type theorem on some simple Lie groups. **(82c:43009)**
 Poguntke, Detlev Symmetry and nonsymmetry for a class of exponential Lie groups. **(82b:43013)**
 Saka, Kōichi Besov spaces and Sobolev spaces on a nilpotent Lie group. **(82a:46035)**
 Scott, David Selberg-type zeta functions for the group of complex two by two matrices of determinant one. **(82c:10050)**
 Strömberg, Jan-Olov Weak type L^1 estimates for maximal functions on noncompact symmetric spaces. **(82k:43010)**
 Zelobenko, D. P. Harmonic analysis on reductive Lie groups. (Russian) **(82c:22001)**

22E35 Analysis on p -adic Lie groups [See also 12A85.]

secondary classifications:

- Agajan, S. M. Characters of the representations of discrete series of the group $SL(2, K)$, where K is a discrete disconnected locally compact field, in the case of a quadratic character. (Russian. English summary) **(82f:22014)**
 Picardello, Massimo A. Locally compact unimodular groups with atomic duals. (Italian summary) **(82c:22015)**
 Silberger, Allan J. Special representations of reductive p -adic groups are not integrable. **(82c:22015)**

22E40 Discrete subgroups of Lie groups [See also 20Hxx and 32Nxx.]

- Apanasov, B. N. Kleinian groups, Teichmüller space and Mostow's rigidity theorem. (Russian) **82g:22011**
 Ash, Avner Non-square-integrable cohomology of arithmetic groups. **82m:22013**
 Cohomology of congruence subgroups $SL(n, \mathbb{Z})$. **82f:22010**
 Besson, G. Groupe de Lie p -adique, immeuble et cohomologie. [p -adic Lie group, building and cohomology] **82k:22010**
 Borel, A. Commensurability classes and volumes of hyperbolic 3-manifolds. **82j:22008**
 Dani, S. G. Strictly nonergodic actions on homogeneous spaces. **82c:22026**
 Doyle, Courtney (with James, David A.) Discreteness criteria and high order generators for subgroups of $SL(2, \mathbb{R})$. **82c:22028**
 James, David A. See Doyle, Courtney, **82c:22028**
 Jørgensen, Palle E. T. Spectral theory for domains in \mathbb{R}^n of finite measure. **82c:22014**
 Mostow, G. D. On a remarkable class of polyhedra in complex hyperbolic space. **82c:22011**
 Muradjan, R. M. Discrete subgroups of three-dimensional rotation groups. (Russian. English summary) **82j:22009**
 Rohlfes, J. Maximal arithmetically defined groups and related group schemes. **82a:22012**
 Schwermer, Joachim A note on link complements and arithmetic groups. **82c:22027**
 Serre, Jean-Pierre Arithmetic groups. **82b:22021**

secondary classifications:

- Beardon, A. F. (with Waterman, P. L.) Strongly discrete subgroups of $SL(2, \mathbb{C})$. **(82i:30065)**
 Brooks, Robert (with Matelski, J. Peter) The dynamics of 2-generator subgroups of $PSL(2, \mathbb{C})$. **(82j:10045)**
 Dani, S. G. Dynamics of horospherical flows. **(82d:58034)**
 (with Raghavan, Srinivasacharya) Orbits of Euclidean frames under discrete linear groups. **(82j:10040)**
 Eberlein, Patrick Lattices in spaces of nonpositive curvature. **(82m:53040)**
 Fine, Benjamin Congruence subgroups of the Picard group. **(82d:20044)**
 Griffiths, H. B. The topography of 2×2 real matrices. I. **(82c:57025a)**
 The topography of 2×2 real matrices. II. **(82c:57025b)**
 The topography of 2×2 real matrices. III. **(82c:57025c)**
 Grunewald, Fritz J. (with Schwermer, Joachim) Arithmetic quotients of hyperbolic 3-space, cusp forms and link complements. **(82j:10046)**
 See also Mennicke, J. L., **(82f:57009)**
 Herrlich, Frank Endlich erzeugbare p -adische diskontinuierliche Gruppen. **(82f:14022)**
 Holzapfel, Rolf-Peter ★ Arithmetische Kugelquotientenflächen. (German) [Arithmetic quotient surfaces] **(82a:10030b)**
 Humphreys, James E. ★ Arithmetic groups. **(82j:10041)**
 Jørgensen, Palle E. T. Partial differential operators and discrete subgroups of a Lie group. **(82b:22025)**
 (Jørgensen, Troels) See Rosenberger, Gerhard, **(82c:30071)**
 Kruskal, S. L. Some rigidity theorems for discontinuous groups. (Russian) **(82k:20078)**
 Leptin, H. Über die schwache Wiener'sche Eigenschaft für Liesche Gruppen. **(82a:43003)**
 Matelski, J. Peter See Brooks, Robert, **(82j:10045)**
 Mennicke, J. L. (with Grunewald, Fritz J.) Some 3-manifolds arising from $PSL_2(\mathbb{Z}[i])$. **(82f:57009)**
 Milnor, John Hyperbolic geometry: the first 150 years. **(82m:57005)**
 Milovanov, M. V. Description of solvable Lie groups with a given uniform subgroup. (Russian) **(82b:22017)**
 Nicholls, Peter J. Fundamental regions and the type problem for a Riemann surface. **(82a:30055)**
 Nikulin, V. V. On the arithmetic groups generated by reflections in Lobachevskii spaces. (Russian) **(82m:57029)**
 Raghavan, Srinivasacharya See Dani, S. G., **(82j:10040)**

- Rapinik, A. S. Platonov's conjecture on genus in arithmetic groups. (Russian. English summary) (82i:20053)
- Raymond, Frank (with Vasquez, Alphonse T.) 3-manifolds whose universal coverings are Lie groups. (82i:57011)
- Rosenberger, Gerhard Eine Bemerkung zu einer Arbeit von T. Jørgensen. (82c:30071)
- Schwermer, Joachim See Grunewald, Fritz J., (82j:10046)
- Thomas, C. B. Characteristic classes of representations over imaginary quadratic fields. (82b:57017)
- Thompson, John G. A finiteness theorem for subgroups of $\mathrm{PSL}(2, \mathbb{R})$ which are commensurable with $\mathrm{PSL}(2, \mathbb{Z})$. (82b:20067)
- Vasquez, Alphonse T. See Raymond, Frank, (82i:57011)
- Waterman, P. L. See Beardon, A. F., (82i:30065)
- Zimmer, Robert J. Strong rigidity for ergodic actions of semisimple Lie groups. (82i:22011)

22E41 Continuous cohomology [See also 57R32, 57Txx, 58H10.]

- Mendoza, Eduardo R. ★ Cohomology of PGL_2 over imaginary quadratic integers. (82g:22012)

secondary classifications:

- Ash, Avner (with Rudolph, Lee) The modular symbol and continued fractions in higher dimensions. (82g:12011)
- Non-square-integrable cohomology of arithmetic groups. (82m:22013)
- Bürgisser, Balz On the p -periodicity of arithmetic subgroups of general linear groups. (82h:20064a)
- Finite p -periodic quotients of general linear groups. (82h:20064b)
- Eckmann, Beno Some recent developments in the homology theory of groups (groups of finite and virtually finite dimension). (82d:20049)
- Friedlander, Eric M. (with Parshall, Brian) Étale cohomology of reductive groups. (82m:14008)
- Houard, J.-C. An integral formula for cocycles of Lie groups. (82c:22024)
- Parshall, Brian See Friedlander, Eric M., (82m:14008)
- Pichard, Joëlle Cohomologie continue et cohomologie différentiable des groupes localement compacts. (English summary) (82b:22010)
- Rudolph, Lee See Ash, Avner, (82g:22011)
- Schmid, Wilfried Vanishing theorems for Lie algebra cohomology and the cohomology of discrete subgroups of semisimple Lie groups. (82b:17009)
- Serre, Jean-Pierre Arithmetic groups. (82b:22021)

22E43 Structure and representation of the Lorentz group

- Berezin, A. V. (with Boguš, A. A.; Otčik, V. S.; Fedorov, F. I.) Matrix elements of the principal series of unitary representations of the de Sitter group in the $\mathrm{SO}(4, 1) \supset \mathrm{E}(3) \supset \mathrm{T}_3$ basis. (Russian) (82a:22013)
- Boguš, A. A. See Berezin, A. V.; et al., (82a:22013)
- Fedorov, F. I. ★ Группа Лоренца. (Russian) [The Lorentz group] (82f:22011)
- See also Berezin, A. V.; et al., (82a:22013)
- Horoškin, S. M. Indecomposable representations of Lorentz groups. (Russian) (82k:22011)
- Kosters, M. T. ★ A study of the representations of $\mathrm{SL}(2, \mathbb{C})$ using noninfinitesimal methods. (82e:22029)
- Otčik, V. S. See Berezin, A. V.; et al., (82a:22013)
- Wolf, Kurt Bernhard Canonical transforms. IV. Hyperbolic transforms: continuous series of $\mathrm{SL}(2, \mathbb{R})$ representations. (82d:22012)
- Želomorov, V. A. On spinor representations of pseudo-orthogonal groups. (Russian) (82a:22014)

secondary classifications:

- Belavin, A. A. Discrete groups and integrability of quantum systems. (Russian) (82b:81110)
- Buculescu-Massier, Doina On the Lorentz transformation. (Romanian) (82a:51007)
- Dornfeld, Engelbert (with Wochnik, Helmut) Angles in the Lorentz group. (Polish. German summary) (82g:51008a)
- (with Wochnik, Helmut) Axial symmetries in the Lorentz group. (Polish. German summary) (82g:51008b)
- Hlavaty, L. (with Niederle, J.) Field equations invariant under indecomposable representations of the Lorentz group. (82j:81034)
- Mathews, P. M. (with Setharaman, M.; Takahashi, Yasushi) On the degree of the minimal equation of the matrices in first-order relativistic wave equations. (82g:81037)
- Niederle, J. See Hlavaty, L., (82j:81034)
- Setharaman, M. See Mathews, P. M.; et al., (82g:81037)
- Takahashi, Yasushi See Mathews, P. M.; et al., (82g:81037)
- Wochnik, Helmut See Dornfeld, Engelbert, (82g:51008a) and (82g:51008b)

22E45 Representations of Lie and linear algebraic groups over real fields: analytic methods [For the purely algebraic theory, see 20G05.]

- Angelopoulos, Eugénios Sur les représentations unitaires irréductibles de $\overline{\mathrm{SO}}_0(p, 2)$. (English summary) (82f:22012)
- Arnal, Didier Solutions de l'équation de la chaleur et vecteurs analytiques du laplacien dans une représentation d'un groupe de Lie. (English summary) (82g:22013)
- Barut, Asim O. (with Rączka, Ryszard) ★ Теория представлений групп и ее приложения. 1. (Russian) [Theory of group representations and its applications. 1] (82g:22014a)
- (with Rączka, Ryszard) ★ Теория представлений групп и ее приложения. 2. (Russian) [Theory of group representations and its applications. 2] (82g:22014b)
- Brion, Michel Représentations irréductibles des groupes de Lie simples dont l'algèbre des U -invariants est régulière. (English summary) [Irreducible representations of simple Lie groups whose algebra of U -invariants is regular] (82m:22014)

- Carriena, José F. (with Santander, Mariano) Projective covering group versus representation groups. (82b:22023)
- Diedonné, Jean A. Special functions and linear representations of Lie groups. (82e:22030)
- Dubovik, O. A. (with Sidonskii, O. B.) A group of matrices and Legendre kernels. (Russian) (82j:22010)
- Dunkl, Charles F. Cube group invariant spherical harmonics and Krawtchouk polynomials. (82j:22011)
- Flensted-Jensen, Mogens On a fundamental series of representations related to an affine symmetric space. (82e:22031)
- K -finite joint eigenfunctions of $U(\mathfrak{g})^K$ on a non-Riemannian semisimple symmetric space G/H . (See 82m:22001)
- (Gavrilik, O. M.) See Barut, Asim O.; et al., (82g:22014)
- Giulini, Saverio (with Travaglini, Giancarlo) L^p -estimates for matrix coefficients of irreducible representations of compact groups. (82b:22024)
- Gutkin, E. Coefficients of Clebsch-Gordan for the holomorphic discrete series. (82f:22013)
- Harish-Chandra A submersion principle and its applications. (82e:22032)
- Hochstenbach, W. J. M. A. A note on coherent states. (82k:22012)
- Holman, Wayne J., III Generalized Bessel functions and the representation theory of $U(2) \otimes \mathbb{C}^{2 \times 2}$. (82a:22015)
- Jørgensen, Palle E. T. Partial differential operators and discrete subgroups of a Lie group. (82b:22025)
- (Klimik, A. U.) See Barut, Asim O.; et al., (82g:22014)
- Knapp, A. W. (with Wallach, Nolan R.) Correction and addition: "Szegő kernels associated with discrete series" [Invent. Math. 34 (1976), no. 3, 163–200; MR 54 #7704]. (82i:22016)
- Kono, Yasuko Multiplicity formulas for discrete series of spin $(1, 2m)$ and $\mathrm{SU}(1, n)$. (82m:22015)
- Lipsman, Ronald L. Orbit theory and harmonic analysis on Lie groups with co-compact nilradical. (82b:22026)
- Michel, Louis (with Mozzyrmas, Jan) Weak equivalence of irreducible representations of little space groups. (82g:22015)
- Mozzyrmas, Jan See Michel, Louis, (82g:22015)
- Nguyen Hô'u Anh Classification of connected unimodular Lie groups with discrete series. (French summary) (82a:22016)
- Rączka, Ryszard See Barut, Asim O., (82g:22014)
- Repka, Joe Base change for tempered irreducible representations of $\mathrm{GL}(n, \mathbb{R})$. (82m:22016)
- Santander, Mariano See Carriena, José F., (82b:22023)
- Sidonskii, O. B. See Dubovik, O. A., (82j:22010)
- Speh, Birgit Indecomposable representations of semisimple Lie groups. (82j:22012)
- Torasso, Pierre Quantification géométrique et représentations de $\mathrm{SL}_3(\mathbb{R})$. (English summary) (82j:22013)
- Travaglini, Giancarlo See Giulini, Saverio, (82b:22024)
- Wallach, Nolan R. See Knapp, A. W., (82i:22016)
- Williams, Floyd L. Vanishing theorems for type $(0, q)$ cohomology of locally symmetric spaces. (82k:22013)
- Wolf, Joseph Albert Representations that remain irreducible on parabolic subgroups. (82i:22017)

secondary classifications:

- Albeverio, Sergio (with Hoegh-Krohn, Raphael) Some Markov processes and Markov fields in quantum theory, group theory hydrodynamics and C^* -algebras. (82j:60127)
- Chen, Augustine C. Homomorphism between $\mathrm{SO}(4, 2)$ and $\mathrm{SU}(2, 2)$. (82c:81046)
- Chiney, S. P. Extended Jacobi polynomials and group representations. II. (82k:33025)
- Duistermaat, J. J. On operators of trace class in $L^2(X, \mu)$. (82f:47040)
- Eguchi, Masaaki (with Kumahara, Keisaku; Muta, Yōichi) A subspace of Schwartz space on motion groups. (82a:22010)
- (with Kumahara, Keisaku) Riemann-Lebesgue lemma for real reductive groups. (82c:22012)
- Filippakis, P. See Jannussis, A. D.; et al., (82b:81045)
- Flato, Moshé (with Simon, Jacques) On a linearization program of nonlinear field equations. (82c:81068)
- (with Fronsdal, C.) Quantum field theory of singletons. The Rac. (82j:81048)
- Flöcher, Karl Ein Algorithmus zur Berechnung der Vielfachheiten von Gewicht. (English summary) (82j:22004)
- Fronsdal, C. See Flato, Moshé, (82j:81048)
- Gautam, N. D. ★ Global analysis and prequantization. (82c:58025)
- Green, Philip Square-integrable representations and the dual topology. (82g:22005)
- Herman, I. A Hamiltonian defined in $L^2(\mathrm{SO}(3), \lambda)$. (82b:81031)
- Hoegh-Krohn, Raphael See Albeverio, Sergio, (82j:60127)
- Jakobsen, Hans Plesner On singular holomorphic representations. (82e:22025)
- Jannussis, A. D. (with Filippakis, P.; Papaloucas, L. C.) Commutation relations and coherent states. (82b:81045)
- Jasselette, P. Extension of Kramers' symbolic method to $\mathrm{SU}(4)$. (82a:22005)
- Johnson, Kenneth D. Paley-Wiener theorems on groups of split rank one. (82c:22013)
- Kirillov, A. A. Invariant operators over geometric quantities. (Russian) (82m:58004)
- Kostant, Bertram The solution to a generalized Toda lattice and representation theory. (82f:58045)
- Kosters, M. T. ★ A study of the representations of $\mathrm{SL}(2, \mathbb{C})$ using noninfinitesimal methods. (82e:22029)
- Kumahara, Keisaku See Eguchi, Masaaki; et al., (82a:22010) and (82c:22012)
- Lax, Peter D. (with Phillips, Ralph S.) Correction to: "Translation representations for the solution of the non-Euclidean wave equation" [Comm. Pure Appl. Math. 32 (1979), no. 5, 617–667; MR 81a:43013]. (82a:43010)
- Muta, Yōichi See Eguchi, Masaaki; et al., (82a:22010)
- Ne'eman, Yuval (with Šijački, Djordje) Correction to: "Gravitational interaction of hadrons and leptons: linear (multiplicity-free) bandor and nonlinear spinor unitary irreducible representations of $\mathrm{SL}(4, \mathbb{R})$ " [Proc. Nat. Acad. Sci. U.S.A. 76 (1979), no. 2, 561–564; MR 80d:81149]. (82j:81076)

Nikolov, B. (with Trifonov, D. A.) $SU(2)$ -coherent states of quantum systems. (Russian) (82c:81041)

Papaloucas, L. C. See Jannussis, A. D.; et al., (82b:81045)

Phillips, Ralph S. See Lax, Peter D., (82a:43010)

Rouvière, François Démonstration de la conjecture de Kashiwara-Vergne pour l'algèbre $sl(2)$. (English summary) (82m:17001)

Schmid, Wilfried Vanishing theorems for Lie algebra cohomology and the cohomology of discrete subgroups of semisimple Lie groups. (82b:17009)

Shahidi, Freydoon On certain L -functions. (82c:10030)

Šijački, Djordje See Ne'eman, Yuval, (82j:81076)

Simon, Jacques See Flato, Moshé, (82c:81068)

Suzuki, Toshiaki Weil-type representations and automorphic forms. (82c:10052)

Trifonov, D. A. See Nikolov, B., (82c:81041)

Vinberg, É. B. Invariant convex cones and orderings in Lie groups. (Russian) (82c:32034)

Želobenko, D. P. Harmonic analysis on reductive Lie groups. (Russian) (82c:22001)

Automorphic forms, representation theory and arithmetic ★Automorphic forms,

representation theory and arithmetic. (82c:10036)

Bombay ★Automorphic forms, representation theory and arithmetic. (82c:10036)

Colloquium:

Automorphic Forms, Representation Theory and Arithmetic ★Automorphic forms, representation theory and arithmetic. (82c:10036)

22E46 Semi-simple Lie groups and their representations

Al-Qubanchi, A. H. A. See King, Ronald Curtis, 82g:22016

Baldoni Silva, M. Welleda The embeddings of the discrete series in the principal series for semisimple Lie groups of real rank one. 82b:22022
(with Kraljević, H.) Composition factors of the principal series representations of the group $Sp(n, 1)$. 82c:22015

Cahn, Robert S. (with Taylor, Michael E.) Asymptotic behavior of multiplicities of representations of compact groups. 82d:22013

Chao, Wen Min Fourier inversion and Plancherel formula for $Sp(n, R)$. 82j:22014

Delorme, Patrick Harish-Chandra homomorphisms and minimal K -types of real

semisimple Lie groups. (See 82m:22001)

Farmer, Thomas A. Irreducibility of certain degenerate principal series representations of $Sp(n, R)$. 82j:22015

Goodman, Roe (with Wallach, Nolan R.) Whittaker vectors and conical vectors. 82c:22018

King, Ronald Curtis (with Al-Qubanchi, A. H. A.) The Weyl groups and weight multiplicities of the exceptional Lie groups. 82g:22016

Kronecker products of representations of exceptional Lie groups. 82b:22010

Klimik, A. U. Representation for matrix elements of compact Lie groups. 82a:22017

Knapp, A. W. (with Stein, Elias M.) Intertwining operators for semisimple groups. II. 82c:22018

Kraljević, H. See Baldoni Silva, M. Welleda, 82c:22015

Lipsman, Ronald L. Restrictions of principal series to a real form. 82c:22019

Mikami, Shunsuke A simple expression of the characters of certain discrete series representations. II. 82c:22016

Ōshima, Toshio Fourier analysis on semisimple symmetric spaces. (See 82m:22001)

Repka, Joe Tensor products of holomorphic discrete series representations. 82c:22017

Speh, Birgit (with Vogan, David A., Jr.) Reducibility of generalized principal series representations. 82c:22018

Stein, Elias M. See Knapp, A. W., 82a:22018

Taylor, Michael E. See Cahn, Robert S., 82d:22013

Torasso, Pierre Sur le caractère de la représentation de Shale-Weil de $Mp(n, R)$ et $Sp(n, C)$. 82a:22019

Vogan, David A., Jr. See Speh, Birgit, 82c:22018

Wallach, Nolan R. See Goodman, Roe, 82c:22018

Zaicev, A. A. Positive polarizations and abelian ideals in Lie algebras. (Russian) 82j:22016

secondary classifications:

Ahmad, Mubarak (with Jallu, M. S.; Sofi, G. Q.) Clebsch-Gordan series for $SU(5)$. (82g:81105)

Barbasch, Dan (with Vogan, David A., Jr.) The local structure of characters. (82c:22024)

Bonnard, Bernard Couples de générateurs de certaines sous-algèbres de Lie de l'algèbre de Lie symplectique affine, et applications. (82c:58038)

Bracken, A. J. (with Leemon, H. L.) A new set of coherent states for the isotropic harmonic oscillator: coherent, angular momentum states. (82b:81073)

Jallu, M. S. See Ahmad, Mubarak; et al., (82g:81105)

Karasev, V. P. (with Šelepín, L. A.) On the theory of generalized coherent states of SU_n groups. (Russian. English summary) (82k:81026)

King, Ronald Curtis Unitary group subjoinings. (82c:22020)

Kušner, G. F. F. I. Karpelevič's compactification is homeomorphic to a sphere. (Russian) (82b:53069)

Leemon, H. L. See Bracken, A. J., (82b:81073)

Patera, J. (with Sharp, R. T.) Generating functions for $SU(2)$ plethysms with fixed exchange symmetry. (82k:81027)

Patton, C. M. On representations in cohomology over pseudo-Hermitian symmetric spaces. (82j:81035)

Šelepín, L. A. See Karasev, V. P., (82k:81026)

Sharp, R. T. See Patera, J., (82k:81027)

Sofi, G. Q. See Ahmad, Mubarak; et al., (82g:81105)

Straier, E. G. Geometric forms of non-Euclidean and quasi-non-Euclidean spaces, connected with unitary representations of simple and quasimple Lie groups. (Russian) (82g:53055)

Vogan, David A., Jr. See Barbasch, Dan, (82c:22024)

22E47 Representations of Lie and real algebraic groups: algebraic methods (Verma modules, etc.) [See also 17B35.]

O'İnskii, G. I. Description of unitary representations with highest weight for the groups $U(p, q)^{-}$. (Russian) 82c:22019

Parthasarathy, Rajagopalan Criteria for the unitarizability of some highest weight modules. 82c:22020

Vogan, David A., Jr. The size of infinite dimensional representations. 82d:22014

secondary classifications:

Bernstein, I. N. (with Gelfand, S. I.) Tensor products of finite- and infinite-dimensional representations of semisimple Lie algebras. (82c:17003)

Deriziotis, D. I. The submodule structure of Weyl modules for groups of type A_1 . (82f:17007)

Gelfand, S. I. See Bernstein, I. N., (82c:17003)

Girardi, G. (with Sciarrino, A.; Sorba, P.) Some relevant properties of $SO(n)$

representations for grand unified theories. (82c:22035)

Joseph, A. Kostant's problem, Goldie rank and the Gelfand-Kirillov conjecture. (82f:17008)

Lusztig, George Hecke algebras and Jantzen's generic decomposition patterns. (82b:20059)

Rocha-Caridi, Alvaro Splitting criteria for q -modules induced from a parabolic and the Bernstein-Gelfand-Gelfand resolution of a finite-dimensional, irreducible q -module. (82f:17006)

Sciarrino, A. See Girardi, G.; et al., (82c:22035)

Sorba, P. See Girardi, G.; et al., (82c:22035)

Wallach, Nolan R. The restriction of Whittaker modules to certain parabolic subalgebras. (82b:17014)

22E50 Representations of Lie and linear algebraic groups over local fields

Agajan, S. M. Characters of the representations of discrete series of the group $SL_2(K)$, where K is a discrete disconnected locally compact field, in the case of a quadratic character. (Russian. English summary) 82f:22014

Asmuth, C. (with Repka, Joe) Supercuspidal components of the quaternion Weil representation of $SL_2(\mathbb{F})$. 82j:22017

Gelbart, Stephen (with Knapp, A. W.) Irreducible constituents of principal series of $SL_n(k)$. 82j:22018

Gérardin, Paul (with Kutzko, Philip) Facteurs locaux pour $GL(2)$. 82i:22020

Jacquet, Hervé (with Piatetski-Shapiro, Ilya Iosifovitch; Shalika, Joseph) Conducteur des représentations génériques du groupe linéaire. (English summary) 82f:22015

(with Piatetski-Shapiro, Ilya Iosifovitch; Shalika, Joseph) Facteurs L et ϵ du groupe linéaire: théorie archimédienne. (English summary) L - and ϵ -factors for the linear group: Archimedean theory] 82c:22021

Knapp, A. W. (with Zuckerman, Gregg) Multiplicity one fails for p -adic unitary principal series. 82a:22020

See also Gelbart, Stephen, 82j:22018

Kutzko, Philip See Gérardin, Paul, 82i:22020

O'İnskii, G. I. New "large" groups of type I. (Russian) 82k:22014

Piatetski-Shapiro, Ilya Iosifovitch See Jacquet, Hervé; et al., 82f:22015 and 82i:22021

Repka, Joe See Asmuth, C., 82j:22017

Shalika, Joseph See Jacquet, Hervé; et al., 82f:22015 and 82i:22021

Silberger, Allan J. Special representations of reductive p -adic groups are not integrable. 82c:22015

Zuckerman, Gregg See Knapp, A. W., 82a:22020

secondary classifications:

Besson, G. Groupe de Lie p -adique, immeuble et cohomologie. [p -adic Lie group, building and cohomology] (82k:22010)

Clozel, Laurent Changement de base pour les représentations tempérées des groupes réductifs réels. (English summary) (82b:10034)

Freitag, Eberhard Thetareihen mit harmonischen Koeffizienten zur Siegelschen Modulgruppe. (82a:10029)

Harish-Chandra A submersion principle and its applications. (82c:22032)

Hashizume, Michihiko Whittaker models for real reductive groups. (82g:10048)

Jacquet, Hervé (with Piatetski-Shapiro, Ilya Iosifovitch; Shalika, Joseph) Facteurs L et ϵ du groupe linéaire. (English summary) (82c:10038)

Koch, Helmut (with Zink, Ernst-Wilhelm) ★Zur Korrespondenz von Darstellungen der Galoisgruppen und der zentralen Divisionsalgebren über lokalen Körpern (der zahme Fall). (German) [On the correspondence of representations of Galois groups and the central division algebras over local fields (the tame case)] (82b:12013)

Kottwitz, Robert Edward Orbital integrals on GL_2 . (82b:10037)

Kutzko, Philip The Langlands conjecture for GL_2 of a local field. (82c:12019)

Langlands, Robert P. Stable conjugacy: definitions and lemmas. (82j:10054)

Piatetski-Shapiro, Ilya Iosifovitch See Jacquet, Hervé; et al., (82c:10038)

Rallis, S. (with Schiffmann, G.) On a relation between SL_n cusp forms and cusp forms on tube domains associated to orthogonal groups. (82c:10040)

Rose, Julian On zeta functions of matrix algebras and distributions. (82g:12018)

Schiffmann, G. See Rallis, S., (82c:10040)

Serre, Jean-Pierre ★Trees. (82c:20083)

Shalika, Joseph See Jacquet, Hervé; et al., (82c:10038)

Shintani, Takuro On liftings of holomorphic cusp forms. (82c:10051)

(Stillwell, John C.) See Serre, Jean-Pierre, (82c:20083)

Wolf, Joseph Albert Representations that remain irreducible on parabolic subgroups. (82i:22017)

Zink, Ernst-Wilhelm See Koch, Helmut, (82b:12013)

22E55 Representations of Lie and linear algebraic groups over global fields and adèle rings [See also 20G05.]

secondary classifications:

- Gelbart, Stephen** (with Piatetski-Shapiro, Ilya Iosifovitch) Distinguished representations and modular forms of half-integral weight. (82b:10035)
- Gérardin, Paul** (with Labesse, J.-P.) The solution of a base change problem for $GL(2)$ (following Langlands, Saito, Shintani). (82c:10047)
Changement du corps de base pour les représentations de $GL(2)$ [d'après R. P. Langlands, H. Saito [Hiroshi Saito] et T. Shintani]. (82b:10036)
- Green, Philip** Square-integrable representations and the dual topology. (82g:22005)
- Harris, Michael** The annihilators of p -adic induced modules. (82f:20018)
- Jacquet, Hervé** (with Shalika, Joseph) On Euler products and the classification of automorphic representations. I. (82m:10050a)
(with Shalika, Joseph) On Euler products and the classification of automorphic forms. II. (82m:10050b)
- Kazhdan, David** An introduction to Drinfel'd's "Shtuka". (82f:12018)
- Labesse, J.-P.** See **Gérardin, Paul**, (82c:10047)
- Lai, K. F.** Tamagawa number of reductive algebraic groups. (82d:20043)
- Langlands, Robert P.** ★Base change for $GL(2)$. (82a:10032)
See also **Gérardin, Paul**, (82b:10036)
- Murase, Atsushi** Sur l'uniformité de la distribution de G_D dans G_A . (See 82b:10004)
- Piatetski-Shapiro, Ilya Iosifovitch** Tate theory for reductive groups and distinguished representations. (82f:10037)
See also **Gelbart, Stephen**, (82b:10035)
- (Saito, Hiroshi)** See **Gérardin, Paul**, (82b:10036)
- Shahidi, Freydoon** On certain L -functions. (82i:10030)
- Shalika, Joseph** See **Jacquet, Hervé**, (82m:10050a) and (82m:10050b)
(Shintani, Takuro) See **Gérardin, Paul**, (82b:10036)
- Vignéras, Marie-France** Valeur au centre de symétrie des fonctions L associées aux formes modulaires. [The value at the center of symmetry of the L functions associated to modular forms] (See 82j:10004)
- Waldspurger, J. L.** Correspondance de Shimura. [Shimura correspondence] (See 82j:10004)
- Automorphic forms, representation theory and arithmetic** ★Automorphic forms, representation theory and arithmetic. (82i:10036)
- Bombay** ★Automorphic forms, representation theory and arithmetic. (82i:10036)
- Colloquium:**
Automorphic Forms, Representation Theory and Arithmetic ★Automorphic forms, representation theory and arithmetic. (82i:10036)

22E60 Lie algebras of Lie groups {For the algebraic theory of Lie algebras, see 17Bxx.}

secondary classifications:

- Barut, Asim O.** (with Raczka, Ryszard) ★Теория представлений групп и ее приложения. 1. (Russian) [Theory of group representations and its applications. 1] (82g:22014a)
(with Raczka, Ryszard) ★Теория представлений групп и ее приложения. 2. (Russian) [Theory of group representations and its applications. 2] (82g:22014b)
- (Gavrilik, O. M.)** See **Barut, Asim O.**; et al., (82g:22014a) and (82g:22014b)
- Karasev, M. V.** (with Maslov, V. P.) Global asymptotic operators of a regular representation. (Russian) (82e:81020)
- (Klimik, A. U.)** See **Barut, Asim O.**; et al., (82g:22014a) and (82g:22014b)
- Leite, Maria Luiza** (with de Miatello, Isabel Dotti) A geometric property of central elements. (82b:22013)
- Maslov, V. P.** See **Karasev, M. V.**, (82e:81020)
- de Miatello, Isabel Dotti** See **Leite, Maria Luiza**, (82b:22013)
- Raczka, Ryszard** See **Barut, Asim O.**, (82g:22014a) and (82g:22014b)

22E65 Infinite-dimensional Lie groups and their Lie algebras [See also 17B65, 58B25, 58H05.]

- Batalin, I. A.** Quasigroup construction and first class constraints. 82k:22016
- Gaveau, Bernard** (with Trauber, Philip) Mesures et représentations non locales pour les groupes de Lie d'applications. (English summary) 82m:22017
- Gelfand, I. M.** See **Vershik, A. M.**; et al., 82h:22011
- Graev, M. I.** See **Vershik, A. M.**; et al., 82h:22011
- Guichardet, Alain** Représentations de G^x (G compact) selon Verchik-Gelfand-Graev et Ismagilov. 82e:22033
- Ismagilov, R. S.** Imbedding of a group of measure-preserving diffeomorphisms into a semidirect product and its unitary representations. (Russian) 82b:22027
- Kaljužnyi, V. N.** Quasifinite isometry groups of Minkowski spaces. (Russian) 82a:22021
- Kirillov, A. A.** Infinite-dimensional groups, their representations, orbits, invariants. 82a:22022
- Ōmori, Hideki** Theory of infinite-dimensional Lie groups. (Japanese) 82c:22021
- Trauber, Philip** See **Gaveau, Bernard**, 82m:22017
- Vershik, A. M.** (with Gelfand, I. M.; Graev, M. I.) Remarks on the representations of a group of functions with values in a compact Lie group. (Russian. English summary) 82b:22011

secondary classifications:

- Albeverio, Sergio** (with Hoegh-Krohn, Raphael) Martingale convergence and the exponential interaction in \mathbb{R}^d . (82i:81072)
- Arnal, Didier** (with Cortet, J. C.; Flato, Moshé; Sternheimer, D.) Star-product: quantization and representations without operators. (82c:81019)
- Balanterkin, A. Baha** (with Bars, Itzhak) Dimension and character formulas for Lie supergroups. (82b:81049)

- Bars, Itzhak** See **Balanterkin, A. Baha**, (82b:81049)
- Cortet, J. C.** See **Arnal, Didier**; et al., (82c:81019)
- D'Auria, R.** (with Regge, Tullio; Fré, P.) The supergroup manifold formulation of the Wess-Zumino multiplet revisited: the supercurrent and the supergravity auxiliary fields. (82i:83071)
- Flato, Moshé** (with Lichnerowicz, André) Cohomologie des représentations définies par la dérivation de Lie et à valeurs dans les formes, de l'algèbre de Lie des champs de vecteurs d'une variété différentiable. Premiers espaces de cohomologie. Applications. (English summary) (82a:58025)
(with Guenin, M.) Mass generation within conformal invariant theories. (82b:81085)
See also **Arnal, Didier**; et al., (82c:81019)
- Fré, P.** See **D'Auria, R.**; et al., (82i:83071)
- Fučić, V. I.** A new method of investigating the group properties of systems of partial differential equations. (Russian. English summary) (82i:58086)
- Gill, Tepper L.** Time-ordered operators. I. Foundations for an alternative view of reality. (82b:47057)
- Guenin, M.** See **Flato, Moshé**, (82b:81085)
- Hoegh-Krohn, Raphael** See **Albeverio, Sergio**, (82i:81072)
- Ismagilov, R. S.** On the group of volume-preserving diffeomorphisms. (Russian) (82f:58023)
- Ivanov, E. A.** (with Sorin, A. S.) Structure of representations of a conformal supergroup in the $OSP(1,4)$ -basis. (Russian. English summary) (82c:17011)
- Kirillov, A. A.** The orbits of the group of diffeomorphisms of the circle, and local Lie superalgebras. (Russian) (82j:17005)
- Kree, Paul** Mathematical analysis of the functional method in quantum field theory. (See 82b:8104a)
- Lefebvre, J.** ★Transformations infinitésimales conformes et automorphismes de certaines structures presque symplectiques. (French) [Conformal infinitesimal transformations and automorphisms of certain almost symplectic structures] (82e:53058)
- Lichnerowicz, André** See **Flato, Moshé**, (82a:58025)
- Lukierski, Jerzy** Graded orthosymplectic group $OSP_{\alpha,1}$ and fundamental fermionic twistor variables. (82c:81147)
- Maeda, Yoshiaki** See **Ōmori, Hideki**; et al., (82b:58089)
- Nakanishi, Noboru** (with Ojima, Izumi) Superalgebras of nonabelian gauge theories in the manifestly-covariant canonical formalism. (82i:81147a)
- Ne'eman, Yuval** (with Šijački, Djordje) Minimal and centered graded spin-extensions of the $SL(3, \mathbb{R})$ algebra. (82h:17011)
See also **Thierry-Mieg, Jean**, (82b:83070)
- Ojima, Izumi** See **Nakanishi, Noboru**, (82i:81147a)
- Ōmori, Hideki** (with Maeda, Yoshiaki; Yoshioka, Akira) On regular Fréchet-Lie groups. I. Some differential geometrical expressions of Fourier integral operators on a Riemannian manifold. (82b:58089)
- Regge, Tullio** See **D'Auria, R.**; et al., (82i:83071)
- Segal, Graeme** Unitary representations of some infinite-dimensional groups. (82k:22004)
- Šijački, Djordje** See **Ne'eman, Yuval**, (82b:17011)
- Sohnius, Martin F.** The conformal group in superspace. (82a:53069)
- Solomon, A. I.** Dynamical group model of superfluid helium three. (82i:81171)
- Sorin, A. S.** See **Ivanov, E. A.**, (82c:17011)
- Sternheimer, D.** See **Arnal, Didier**; et al., (82c:81019)
- Thierry-Mieg, Jean** (with Ne'eman, Yuval) Extended geometric supergravity on group manifolds with spontaneous fibration. (82b:83070)
- Xia, Dao Xing** On the representation of the local current algebra. (82h:81065)
- Yoshioka, Akira** See **Ōmori, Hideki**; et al., (82b:58089)

22E70 Applications of Lie groups to physics; explicit representations [See also 81C40, 81Gxx.]

- Aliauskas, S.** (with Norvaiša, E.) Bases of two-parameter representations and some isofactors of the groups $U_n \supset SO_n$. (Russian. Lithuanian and English summaries) 82b:22028
Complete systems of Clebsch-Gordan coefficients of the group SO_3 . (Russian. Lithuanian and English summaries) 82c:22034
- Dubovik, O. A.** Representation of a group of conformal motions of Euclidean space and Legendre functions on the cut. (Russian) 82f:22016
- El-Sharkaway, N. G.** (with Jahn, H. A.; King, Ronald Curtis) Regular products of the single-hook characters of the unitary group. 82i:22022
- Godunov, S. K.** ★Коэффициенты Клебша-Гордана и специальные функции для решения инвариантных уравнений. (Russian) [Clebsch-Gordan coefficients and special functions for the solution of invariant equations] 82f:22017
- Gould, M. D.** General $U(n)$ raising and lowering operators. 82g:22017
- Henrich, Christopher J.** On Gel'fand states of representations of $U(n)$ and the Gel'fand lattice polynomials. 82b:22012
- Jahn, H. A.** See **El-Sharkaway, N. G.**; et al., 82i:22022
- Kasperovitz, P.** The simple characters of $SU(3)$ as solutions of an eigenvalue problem. (See 82b:81004)
- King, Ronald Curtis** See **El-Sharkaway, N. G.**; et al., 82i:22022
- Lemire, F. W.** (with Patera, J.) Congruence number, a generalization of $SU(3)$ triality. 82j:22019
- Lucquiaux, Jean-Claude** Représentations tensorielles du groupe $SO(N)$ et applications. (English summary) 82f:22018
- Macfarlane, A. J.** Parametrizations of unitary matrices and related coset spaces. 82c:22022
- Norvaiša, E.** See **Aliauskas, S.**, 82b:22028
- Patera, J.** See **Lemire, F. W.**, 82j:22019
- Rozenbljum, A. V.** (with Rozenbljum, L. V.) Representations of the group of motions of n -dimensional Euclidean space and Bessel functions of matrix index. (Russian. English summary) 82b:22029
- Rozenbljum, L. V.** See **Rozenbljum, A. V.**, 82b:22029

- Sen, R. N. Group representations on fibre spaces. (See 82h:81004)
- Sun, Hong Zhou On the irreducible representations of the compact simple Lie groups of rank 2. I. (Chinese. English summary) 82g:22018
- Weinert, Ulrich Spherical tensor representation. 82f:22019
- secondary classifications:
- Ahmad, Mubarak (with Jallu, M. S.; Sofi, G. Q.) Clebsch-Gordan series for SU(5). (82g:81105)
- Aldaya, Victor (with de Azcárraga, José A.) Symmetries of the Schrödinger bundle. (82j:81030)
- Aldrovandi, R. (with Monte Lima, I.) A matricial approach to cluster expansions. (82b:82002)
- Anderson, J. T. Lie-algebra approach to symmetry breaking. (82f:81035)
- Angelopoulos, Eugénios (with Flato, Moshé; Fronsdal, C.; Sternheimer, D.) Massless particles, conformal group, and de Sitter universe. (82g:81034)
- Antoine, Jean-Pierre Indefinite metric and Poincaré covariance. (82m:46020h)
- de Azcárraga, José A. See Aldaya, Victor, (82j:81030)
- Bacry, H. (with Cadilhac, M.) Metaplectic group and Fourier optics. (82d:78002)
- Barducci, A. (with Casalbuoni, R.; Dominici, D.; Lusanna, L.) Pseudoclassical description of Weyl particles. (82g:81035)
- Barut, Asim O. (with Rączka, Ryszard) ★Теория представлений групп и ее приложения. 1. (Russian) [Theory of group representations and its applications. 1] (82g:22014a)
- (with Rączka, Ryszard) ★Теория представлений групп и ее приложения. 2. (Russian) [Theory of group representations and its applications. 2] (82g:22014b)
- Basu, Debarata (with Mitra, D.) The Lorentz group in the oscillator realization. III. The group SO(3, 1). (82m:81031)
- Baumgarte, J. Eine Lie-Algebra, die Delaunay-similar-Elemente in der exzentrischen Anomalie erzeugt. (English summary) (82h:70020)
- Beckers, J. (with Harnad, John; Jasselette, P.) Spinor fields invariant under space-time transformations. (82i:81065)
- Bengus, L. E. (with Zupnik, B. M.) Bilocal gauge fields. (Russian) (82c:81101)
- Berezin, A. V. (with Boguś, A. A.; Oñik, V. S.; Fedorov, F. I.) Matrix elements of the principal series of unitary representations of the de Sitter group in the $SO(4, 1) \supset E(3) \supset T_3$ basis. (Russian) (82a:22013)
- Berzi, Vittorio On a condition characterizing the Lorentz and Galilei groups. (82b:83004)
- Bharathi, K. Reduced matrix elements of a coupled tensor in a subgroup basis. (82b:81038)
- Bhattacharya, Gautam Use of some fermion field identities for bosonisation of U(n) Thirring and Schwinger models. (82c:81103)
- Biedenharn, L. C. A kinematical symmetry group construction of hadrons as Regge trajectories. (82b:81128)
- (with Louck, J. D.) Representations of the symmetric group as special cases of the boson polynomials in U(n). (82h:81050)
- (with Holman, Wayne J., III; Milne, Stephen C.) The invariant polynomials characterizing U(n) tensor operators $\langle p, q, \dots, q, 0, \dots, 0 \rangle$ having maximal null space. (82c:81025)
- Boguś, A. A. See Berezin, A. V.; et al., (82a:22013)
- Bowler, K. C. (with Corvi, P. J.; Hey, A. J. G.; Jarvis, P. D.; King, Ronald Curtis) Role of Sp(12, R) in the harmonic-oscillator quark model. (82h:81136)
- Boyle, M. J. (with Paldus, J.) Particle-hole formulation of the unitary group approach to the many-electron correlation problem. II. Matrix element evaluation. (82f:81095b)
- See also Paldus, J., (82f:81095a)
- Brink, Lars (with Schwarz, John H.) Quantum superspace. (82c:81055)
- Butler, P. H. See Reid, M. F., (82c:81059)
- Cadilhac, M. See Bacry, H., (82d:78002)
- Cant, A. The role of noncompact Lie algebras in relativistic wave equations. I, II. (82b:81069)
- Carriñena, José F. (with Santander, Mariano) Antiunitary symmetry operators in quantum mechanics. (82d:81052)
- (with del Olmo, Mariano A.; Santander, Mariano) Kinematic groups and dimensional analysis. (82f:00016)
- Carmeli, M. (with Moroz, B. Z.) Classification of gauge fields and group representations. (82c:81078)
- Casalbuoni, R. See Barducci, A.; et al., (82g:81035)
- Chen, Jin Quan (with Wang, Fan; Gao, Mei Juan; Yu, Zu Rong) A new method of calculation for molecular shell model. (82b:81140)
- Corvi, P. J. See Bowler, K. C.; et al., (82h:81136)
- Cosgrove, Christopher M. Relationships between the group-theoretic and soliton-theoretic techniques for generating stationary axisymmetric gravitational solutions. (82m:83012)
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- Neretin, Ju. A. Differential operators on Lie groups. (Russian) (82j:17016)
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- Kudrjavcev, L. D. ★Курс математического анализа. Том I. (Russian) [A course in mathematical analysis. Vol. I] 82j:26002
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- Prijatelj, Niko ★Uvod v matematično analizo. I. Del. (Slovenian) [Introduction to mathematical analysis. Part I] 82b:26001
- (Raikov, D. A.) See Pólya, G.; et al., 82c:26001
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- Sikorski, Roman ★Rachunek różniczkowy i całkowy. (Polish) [Differential and integral calculus] 82a:26002
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- Stromberg, Karl R. ★Introduction to classical real analysis. 82c:26002
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- Aliprantis, Charalambos D. (with Burkinshaw, Owen) ★Principles of real analysis. (82j:28001)
- (Bögel, Karl) See Natanson, I. P., (82m:28002)
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- Dence, Thomas P. On the monotonicity of a class of exponential sequences. (82c:40001)
- Efimov, A. V. (with Zolotarev, Ju. G.; Terpigoreva, V. M.) ★Математический анализ (специальные разделы). Часть II. (Russian) [Mathematical analysis (special sections). Part II] (82m:00001b)
- Fricker, François Zur Begründung der Exponentialfunktion über Folgen. (82b:40001)
- Goetschel, Roy H., Jr. See Voxman, William L., (82f:00003)
- Hainz, Josef ★Mathematik für Naturwissenschaftler. (German) [Mathematics for scientists] (82m:00008)
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- Mjelbo, Lars C. On nonstandard analysis. (Danish) (82b:03002)
- Natanson, I. P. ★Theorie der Funktionen einer reellen Veränderlichen. (German) [Theory of functions of a real variable] (82m:28002)
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26-02 Advanced exposition (research surveys, monographs, etc.)

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- Bullen, P. S. Nonabsolute integrals: a survey. (82a:26006)
- Schwartz, Laurent ★Kurs analizy matematycznej. Tom II. (Polish) [A course on mathematical analysis. Vol. II] (82c:00003)
- (Trajdos, Tadeusz) See Schwartz, Laurent, (82c:00003)

26-03 Historical (must also be assigned at least one classification number from Section 01)

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- (d'Alembert, J.) See Euler, Leonhard, (82h:01075)
- (Baire, René) See Correspondence: Baire, René, (82c:01041)
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- Euler, Leonhard ★Commercium epistolicum. [Correspondence] (82h:01075)
- (Grigor'jan, A. T.) See Euler, Leonhard, (82h:01075)
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- (Luzin, N. N.) See Correspondence: Baire, René, (82c:01041)
- Medvedev, F. A. A theorem of Ampère. (Russian. English summary) (82c:01028)
- Petrova, S. S. (with Romanowska, D. A.) On the history of the discovery of Taylor series. (Russian) (82f:01033)
- (Picolet, Guy) See Euler, Leonhard, (82h:01075)
- Rickey, V. Frederick (with Tuchinsky, Philip M.) An application of geography to mathematics: history of the integral of the secant. (82g:01019)
- Romanowska, D. A. See Petrova, S. S., (82f:01033)
- Russ, S. B. A translation of Bolzano's paper on the intermediate value theorem. (French summary) (82c:01072)
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- (Taton, René) See Euler, Leonhard, (82h:01075)
- Tuchinsky, Philip M. See Rickey, V. Frederick, (82g:01019)
- (de la Vallée Poussin, Charles) See Correspondence: Baire, René, (82c:01041)
- (Volterra, Vito) See Correspondence: Baire, René, (82c:01041)
- Correspondence:
Baire, René Lettres à René Baire. (82c:01041)

26-04 Explicit machine computation and programs (not the theory of computation or programming)

26-06 Proceedings, conferences, etc.

Fractional calculus and its applications ★On fractional calculus and its applications. 82h:26003

Symposium:

- Fractional Calculus and its Applications ★On fractional calculus and its applications. 82h:26003

26Axx Functions of one variable

26A03 Foundations: limits and generalizations, elementary topology of the line

- Antoni, Jozef (with Šalát, Tibor) On the A -continuity of real functions. (Slovak and Russian summaries) 82h:26004

Šalát, Tibor See Antoni, Jozef, 82h:26004

- Strauch, Otto The decomposition of uncountable closed sets of real numbers. (Slovak and Russian summaries) 82c:26001

secondary classifications:

- Shelton, Robert O. Aperiodic words on three symbols. (82m:05004a)
Aperiodic words on three symbols. II. (82m:05004b)
(with Soni, Raj P.) Aperiodic words on three symbols. III. (82m:05004c)
- Soni, Raj P. See Shelton, Robert O., (82m:05004c)

26A06 One-variable calculus

- Alberti, Furio A root property of a psi-type equation. 82c:26002
- Bodnarcuk, P. I. (with Demkiv, I. I.) Generalized nonlinear Taylor-Aitken formula. (Russian) 82c:26003
- Cameron, D. E. An algorithm for fractions. 82f:26002
- Căciun, Constantin V. Some properties of differentiable functions. (Romanian) 82c:26003
- Davenport, J. H. Table errata: *Tables of indefinite integrals* [English translation, Dover, New York, 1961; MR 23 #A256] by G. Petit Bois. 82j:26003
- Demkiv, I. I. See Bodnarcuk, P. I., 82c:26003
- Enčev, K. On multiple differentiation of x -composite and x -implicit functions associated with the analysis and synthesis of mechanisms. (Bulgarian. Russian and English summaries) 82d:26001
- Friedlander, John B. (with Wilker, John B.) A budget of boxes. 82d:26002
- Knight, William J. Functions with zero right derivatives are constant. 82g:26004
- Meyerson, Mark D. Every power series is a Taylor series. 82h:26005
- Navrátil, Jiří A note on the theorem on change of variable in a Riemann integral. (Czech. English summary) 82i:26001
- Newman, Donald J. Differentiation of asymptotic formulas. 82h:26006
- (Petit Bois, G.) See Davenport, J. H., 82j:26003
- Roman, Steven M. The formula of Faà di Bruno. 82d:26003
- Wilker, John B. See Friedlander, John B., 82d:26002

secondary classifications:

- Abian, Alexander Generalizing the generalized mean-value theorem. (82j:26006)
- Doneddu, Alfred ★Topologie. (French) [Topology] (82m:26001)
- Rizzitelli, Giuseppe A generalization of the theorem on finite increments. (Italian. English and French summaries) (82j:26007)

26A09 Elementary functions

- Kim, Scott Non-Euclidean harmony. (See 82h:00003)

26A12 Rate of growth of functions, orders of infinity, slowly increasing functions [See also 26A48.]

- Boshermitz, Michael An extension of Hardy's class L of "orders of infinity". 82m:26002
- Chan, L. Y. (with Chen, Yung-Ming; Liu, Ming Chit) Some properties of asymptotic functions. 82g:26005
- Chen, Yung-Ming See Chan, L. Y.; et al., 82g:26005
- Davies, Roy O. Nonmonotonic implies very oscillatory. 82g:26006
- Liu, Ming Chit See Chan, L. Y.; et al., 82g:26005

secondary classifications:

- Aljančić, S. Abel- und Mercer-Sätze mit Restglied. (82c:40010)
- Bruna, Joaquim On inverse-closed algebras of infinitely differentiable functions. (82c:46039)
- Geluk, J. L. II-regular variation. (82h:40004)
An Abel-Tauber theorem for partitions. (82k:10066)
- Gurarii, V. P. Harmonic analysis of functions that are bounded on the right semiaxis and growing on the left semiaxis. (Russian. English summary) (82j:30034)
- Liu, Wen A class of continuous functions. II. (82h:26007a)
A class of continuous functions. III. (82h:26007b)
- Maravić, Manojlo Sur certaines applications des fonctions à croissance lente avec reste. (Serbo-Croatian summary) (82c:40007)
- Ostrowski, Alexander On the remainder term of the de Moivre-Laplace formula. (82b:41035)
- Soni, K. (with Soni, Raj P.) Asymptotic solution to a class of nonlinear Volterra integral equations. (82g:45021)
- Soni, Raj P. See Soni, K., (82g:45021)

26A15 Continuity and related questions (modulus of continuity, semicontinuity, discontinuities, etc.) [For properties determined by Fourier coefficients, see 42A16; for those determined by approximation properties, see 41A25.]

- Bruckner, A. M. (with Ceder, J.) Luzin-Menchoff properties for functions. 82j:26004
- Ceder, J. The cluster set structure of real functions. 82c:26004
See also Bruckner, A. M., 82j:26004
- Garrett, B. D. Some characterizations of pointwise discontinuous functions. 82h:26004
- Kaplan, L. I. Discontinuity points of a function and points of existence of an infinite derivative. (Russian) 82h:26005
- Kostyrko, Pavel (with Neubrunn, Tibor; Smítal, J.; Šalát, Tibor) On locally symmetric and symmetrically continuous functions. 82c:26005
- Liu, Wen A class of continuous functions. II. 82h:26007a

- A class of continuous functions. III. 82h:26007b
 Moliseev, A. A. A class of functions with a given modulus of continuity. (Russian. English summary) 82f:26003
 Neubrunn, Tibor See Kostyrko, Pavel; et al., 82c:26005
 Šalát, Tibor See Kostyrko, Pavel; et al., 82c:26005
 Smital, J. See Kostyrko, Pavel; et al., 82c:26005
 Totik, V. On the continuity of functions in connection with a problem of V. G. Krotov. (Russian summary) 82h:26008
 Xie, Ting Fan On smoothness and differentiability of functions. (Chinese. English summary) 82i:26002

secondary classifications:

- Gaimnazarov, G. Moduli of smoothness of fractional order of functions defined on the whole real axis. (Russian. Tajiki summary) (82j:42011)
 Guseinov, E. G. Marchaud's theorem on the relation between moduli of smoothness in L_2 . (Russian) (82k:26014)
 Pu, H. H. See Pu, H. W., (82k:54014)
 Pu, H. W. (with Pu, H. H.) On Darboux continuity and continuity. (82k:54014)

26A16 Lipschitz (Hölder) classes

- Zá, Felipe On functions satisfying a local Lipschitz condition of order α . 82h:26009

secondary classifications:

- Cobzaş, Ştefan (with Mustăţa, Costică) Norm-preserving extension of convex Lipschitz functions. (82j:41034)
 Ditzian, Z. Lipschitz classes and convolution approximation processes. (82i:46038)
 Lapin, S. V. Relations between moduli of continuity of functions in different symmetric spaces and some embedding theorems. (Russian) (82i:46044)
 Mustăţa, Costică See Cobzaş, Ştefan, (82j:41034)

26A18 Iteration [See also 39B10, 47H10, 54H25.]

- Creutz, Michael (with Sternheimer, R. M.) On the convergence of iterated exponentiation. I. 82b:26006
 Di Lena, G. A fixed-point theorem intended for the calculation of real zeros of a function. (Italian. English summary) 82f:26004
 Graw, R. (with Kuczma, M.) Infinite discrete sets of limit points of iterative sequences of continuous functions. 82g:26007
 Knoebel, R. Arthur Exponentials reiterated. 82e:26004
 Kuczma, M. See Graw, R., 82g:26007
 Sternheimer, R. M. See Creutz, Michael, 82b:26006
 Vertgeim, B. A. Rate of convergence of some iteration processes. (Russian) 82a:26003

secondary classifications:

- Chang, Shau Jin (with Wortis, Michael; Wright, Jon A.) Iterative properties of a one-dimensional quartic map: critical lines and tricritical behavior. (82j:58087)
 Collet, Pierre (with Eckmann, Jean-Pierre) Properties of continuous maps of the interval to itself. (82h:58051)
 (with Eckmann, Jean-Pierre) On the abundance of aperiodic behaviour for maps on the interval. (82e:58035)
 Eckmann, Jean-Pierre See Collet, Pierre, (82h:58051) and (82e:58035)
 Lanford, Oscar E., III Remarks on the accumulation of period-doubling bifurcations. (82h:58052)
 Llibre, Jaume Sufficient conditions for a continuous map of \mathbb{R}^n into itself to have m -periodic points for all $m > 0$. (82f:58074)
 Targowski, György ★Topics in iteration theory. (82j:39001)
 Wortis, Michael See Chang, Shau Jin; et al., (82j:58087)
 Wright, Jon A. See Chang, Shau Jin; et al., (82j:58087)

26A21 Classification of real functions; Baire classification of sets and functions [See also 04A15, 28A05, 54C50.]

- Ceder, J. (with Pearson, T. L.) On typical bounded Darboux Baire one functions. 82j:26005
 Foran, J. (with Humke, P. D.) Some set-theoretic properties of σ -porous sets. 82e:26005
 Giacalone, Ermanno See Lorefine, M. Fiorella, 82c:26006
 Humke, P. D. See Foran, J., 82e:26005
 Lorefine, M. Fiorella (with Giacalone, Ermanno) Functions with connected range and associated measures: Darboux functions. (Italian) 82c:26006
 Mañik, Tadeusz (with Świątkowski, Tadeusz) On some class of functions with Darboux's characteristic (Polish and Russian summaries) 82k:26002
 Pearson, T. L. See Ceder, J., 82j:26005
 Świątkowski, Tadeusz See Mañik, Tadeusz, 82k:26002

secondary classifications:

- Agronsky, S. J. (with Biskner, R.; Bruckner, A. M.; Mañik, J.) Representations of functions by derivatives. (82e:26006)
 Biskner, R. See Agronsky, S. J.; et al., (82e:26006)
 Bruckner, A. M. See Agronsky, S. J.; et al., (82e:26006)
 Grande, Zbigniew Sur la mesurabilité des fonctions de plusieurs variables. (Russian summary) (82a:28004)
 Jellett, F. The sequential stability index and certain spaces of affine functions. (82h:46014)
 Kostyrko, Pavel (with Neubrunn, Tibor; Smital, J.; Šalát, Tibor) On locally symmetric and symmetrically continuous functions. (82e:26005)
 Mañik, J. See Agronsky, S. J.; et al., (82e:26006)

- Miller, Harry I. Some results connected with a problem of Erdős. II. (82c:28003) (with Xenikakis, Polychronis J.) Some results connected with a problem of Erdős. (Serbo-Croatian summary) (82c:28002)
 Neubrunn, Tibor See Kostyrko, Pavel; et al., (82c:26005)
 Rudin, Walter Lebesgue's first theorem. (82k:28006)
 Šalát, Tibor See Kostyrko, Pavel; et al., (82c:26005)
 Smital, J. See Kostyrko, Pavel; et al., (82c:26005)
 Xenikakis, Polychronis J. See Miller, Harry I., (82c:28002)

26A24 Differentiation (functions of one variable): general theory, generalized derivatives, mean-value theorems [See also 28A15.]

- Abian, Alexander Generalizing the generalized mean-value theorem. 82j:26006
 Agronsky, S. J. (with Biskner, R.; Bruckner, A. M.; Mañik, J.) Representations of functions by derivatives. 82e:26006
 Biskner, R. See Agronsky, S. J.; et al., 82e:26006
 Bruckner, A. M. (with Goffman, Casper) Approximate differentiation. 82d:26004
 On destruction of derivatives via changes of scale. 82k:26003
 See also Agronsky, S. J.; et al., 82e:26006
 Del Vecchio, Teresa On the differentiability of one function with respect to another. (Italian. English summary) 82f:26005
 Denkowski, Zdzisław An example of a continuous function without the usual, the approximative and the distributional derivative. 82c:26007
 Evans, Michael Jon (with Humke, P. D.) On the approximate derivatives of continuous functions. 82c:26007
 Goffman, Casper See Bruckner, A. M., 82d:26004
 Haber, Seymour (with Shisha, Oved) On the location of the intermediate point in Taylor's theorem. 82f:26006
 Hancock, Don L. Derivatives and Lebesgue points via homeomorphic changes of scale. 82h:26010
 Hiriart-Urruty, J.-B. A note on the mean value theorem for convex functions. (Italian summary) 82b:26007
 Humke, P. D. See Evans, Michael Jon, 82c:26007
 Ivanek, V. K. A Taylor type formula. (Russian. English summary) 82h:26008
 Kłosińska, Wiktoria On homeomorphism of an interval preserving the T -internal points. (Polish and Russian summaries) 82g:26008
 Krotov, V. G. On differentiability of functions from L^p and H^p for $0 < p < 1$. (Russian) 82f:26007
 Luczak, Mirosława On some problems concerning a generalized derivative of a real function. (Polish and Russian summaries) 82m:26003
 Malešević, Jovan V. On a theorem of G. Darboux and a theorem of D. Trahan. (Serbo-Croatian. Russian summary) 82h:26011
 Mañik, J. See Agronsky, S. J.; et al., 82e:26006
 O'Malley, R. J. Selective derivatives and the M_2 or Denjoy-Clarkson properties. 82h:26009
 Pu, H. H. (with Pu, H. W.) On the set where an approximate derivative is a derivative. 82g:26009
 See also Pu, H. W., 82g:26010
 Pu, H. W. (with Pu, H. H.) On the derivative of a nondecreasing function. 82g:26010
 See also Pu, H. H., 82g:26009
 Rădulescu, Florin Derivatives and analytic functions. 82g:26011
 Rizzitelli, Giuseppe A generalization of the theorem on finite increments. (Italian. English and French summaries) 82j:26007
 Shisha, Oved See Haber, Seymour, 82f:26006
 Thomson, B. S. On full covering properties. 82c:26008
 Zajíček, Luděk On the symmetry of Dini derivatives of arbitrary functions. 82c:26009

secondary classifications:

- Belaja, N. I. An algorithm for constructing an optimally exact derivative of a function in the class $C_{2,L,N}$. (Russian) (82j:65009)
 Blass, Jean-Paul (with Valenza, Antoine) Sur la densité des mesures positives sur \mathbb{R} . (82c:28008a)
 (with Valenza, Antoine) Dérivée approximative d'une mesure positive sur \mathbb{R} , théorème de décomposition. (English summary) (82c:28008b)
 Ceder, J. (with Pearson, T. L.) On typical bounded Darboux Baire one functions. (82j:26005)
 Criciun, Constantin V. Some properties of differentiable functions. (Romanian) (82e:26003)
 Dem'janov, V. F. (with Šomesova, V. K.) Subdifferentials of functions on sets. (82c:90073)
 Giacalone, Angela (with Gori Cocchieri, Candida) A characterization of differentiability in a generalized sense of mappings with values in Banach spaces. (Italian) (82k:26018)
 Gori Cocchieri, Candida See Giacalone, Angela, (82k:26018)
 Knight, William J. Functions with zero right derivatives are constant. (82g:26004)
 Kwong, Man Kam (with Zettl, A.) Remarks on best constants for norm inequalities among powers of an operator. (82b:47040)
 Liu, Wen A generalization of a theorem of Auerbach and Banach. (Chinese) (82f:26009)
 McMath, John S. (with Sims, S. E.) Mean value theorems for a matrix valued derivative. (82j:65025)
 Onneweer, C. W. On pointwise differentiability of functions on a p -adic or p -series field. (82b:12016)
 Pearson, T. L. See Ceder, J., (82j:26005)
 Powgza, Zbigniew On the differentiability of generalized subadditive functions. (82m:39012)
 Sevast'janov, E. A. The rate of rational approximation of functions and their differentiability. (Russian) (82c:41023)
 Sims, S. E. See McMath, John S., (82j:65025)
 Šomesova, V. K. See Dem'janov, V. F., (82c:90073)
 Størtevaag, G. D. A mapping of classes of generalized Appell polynomials by means of an

- operator of generalized differentiation. (Russian) (82j:47065)
 Valenza, Antoine. See Blass, Jean-Paul, (82c:28008a) and (82c:28008b)
 Xie, Ting Fan. On smoothness and differentiability of functions. (Chinese. English summary) (82i:26002)
 Zajíček, Luděk. On approximate Dini derivatives and one-sided approximate derivatives of arbitrary functions. (82m:26004)
 Zettl, A. See Kwong, Man Kam, (82b:47040)

26A27 Nondifferentiability (nondifferentiable functions, points of nondifferentiability), discontinuous derivatives

- Alsina, James. The Peano curve of Schoenberg is nowhere differentiable. 82k:26004
 Filipczak, F. M. On the derivative of type α . 82f:26008
 On some Marcus problem concerning functions possessing the derivative at points of discontinuity only. 82a:26004
 Liu, Wen. A generalization of a theorem of Auerbach and Banach. (Chinese) 82f:26009
 Zajíček, Luděk. On approximate Dini derivatives and one-sided approximate derivatives of arbitrary functions. 82m:26004

secondary classifications:

- Agronsky, S. J. (with Biskner, R.; Bruckner, A. M.; Mařík, J.) Representations of functions by derivatives. (82c:26006)
 Biskner, R. See Agronsky, S. J.; et al., (82c:26006)
 Bruckner, A. M. See Agronsky, S. J.; et al., (82c:26006)
 Mařík, J. See Agronsky, S. J.; et al., (82c:26006)

26A30 Singular functions, Cantor functions, functions with other special properties

- Kozyrev, S. B. Smoothness of crinkly functions. (Russian. English summary) 82m:26005

secondary classifications:

- Alajbegović, Jusuf (with Kulenović, Mustafa; Miller, Harry I.; Radić, Mirko) On a result of Carathéodory. (Serbo-Croatian summary) (82a:28001)
 Dence, Thomas P. Density points of Cantor sets. (82h:28002)
 Filipczak, F. M. On the derivative of type α . (82f:26008)
 Kulenović, Mustafa. See Alajbegović, Jusuf; et al., (82a:28001)
 Mańk, Tadeusz (with Świątkowski, Tadeusz) On some class of functions with Darboux's characteristic. (Polish and Russian summaries) (82k:26002)
 Miller, Harry I. An analogue of a result of Carathéodory. (82g:28008)
 See also Alajbegović, Jusuf; et al., (82a:28001)
 Radić, Mirko. See Alajbegović, Jusuf; et al., (82a:28001)
 Świątkowski, Tadeusz. See Mańk, Tadeusz, (82k:26002)

26A33 Fractional derivatives and integrals

- Nishimoto, Katsuyuki. Fractional differintegration of products and $(\log z)$, (continued). 82d:26005a
 Some properties of the fractional differintegrated trigonometric functions. 82d:26005b

secondary classifications:

- Bhise, V. M. See Dighe, Madhavi, (82h:33001)
 Dighe, Madhavi (with Bhise, V. M.) On composition of fractional integral operators as an integral operator with Fourier type kernel. (82h:33001)
 Dreyfus, Tommy (with Eisenberg, Theodore) On acceptance of mathematical theories. (82j:01083)
 Džrbašjan, Mk. M. (with Saakjan, B. A.) Expansions in series of generalized absolutely monotone functions. (Russian. English summary) (82k:41024)
 Eisenberg, Theodore. See Dreyfus, Tommy, (82j:01083)
 Kalia, R. N. (with Rosenberger, Gerhard) Application of two forms of generalized Taylor's theorem to Fox's H -function. (82j:33011)
 Lowndes, J. S. On an integral equation. (Spanish summary) (82e:45005)
 On some generalisations of the Riemann-Liouville and Weyl fractional integrals and their applications. (82k:35016)
 Magaril-Il'jaev, G. G. (with Tihomirov, V. M.) On the Kolmogorov inequality for fractional derivatives on the half line. (Russian summary) (82g:26026)
 Rosenberger, Gerhard. See Kalia, R. N., (82j:33011)
 Saakjan, B. A. See Džrbašjan, Mk. M., (82k:41024)
 Skórník, Krystyna. On the fractional integrals and derivatives of a class of generalized functions. (Russian) (82c:46049)
 Sundelius, Björn. Reflection of rarefaction wave in one-dimensional gas flow. (82e:76083)
 Tasche, Manfred (with Wrase, Burghard) Über lineare Differentialgleichungen gebrochener Ordnung und verallgemeinerte Abelsche Integralgleichungen. (82e:44003)
 Tihomirov, V. M. See Magaril-Il'jaev, G. G., (82g:26026)
 Wiener, Klaus. Über ein Randwertproblem bei Differentialgleichungen von nichtganzzahliger Ordnung. (82e:34028)
 Wrase, Burghard. See Tasche, Manfred, (82e:44003)
 Fractional calculus and its applications. ★ On fractional calculus and its applications. (82h:26003)
 Symposium:
 Fractional Calculus and its Applications. ★ On fractional calculus and its applications. (82h:26003)

26A36 Antidifferentiation

secondary classifications:

- Bose, M. K. On special Cesàro-Denjoy-Stieltjes integral. (82i:26003)

26A39 Denjoy and Perron integrals, other special integrals

- Bhattacharyya, P. (with Lahiri, B. K.) On the modified Perron integral. II. 82h:26012
 Bose, M. K. On special Cesàro-Denjoy-Stieltjes integral. 82i:26003
 On the Denjoy-Stieltjes integral. (Serbo-Croatian summary) 82a:26005
 Bullen, P. S. Nonabsolute integrals: a survey. 82a:26006
 De, A. K. See Sarkhel, D. N., 82h:26014
 Demuth, Oswald. On the constructive Perron integral. (Russian. English and Czech summaries) 82h:26013
 Futáš, E. (with Riečan, Beloslav) A modification of the Carathéodory method for upper integrals. (Slovak and Russian summaries) 82g:26012
 Iseki, Kanetsiro. On the summation of linearly ordered series. 82k:26005
 Kubota, Yôto. A characterization of the Denjoy integral. 82m:26006
 Kurzweil, Jaroslav. ★ Nichtabsolut konvergente Integrale. (German) [Nonabsolutely convergent integrals] 82m:26007
 Lahiri, B. K. See Bhattacharyya, P., 82h:26012
 Riečan, Beloslav. See Futáš, E., 82h:26012
 Sarkhel, D. N. (with De, A. K.) The proximally continuous integrals. 82h:26014

secondary classifications:

- Chaffield, J. A. Product integration and eigenvalues. (82a:26007)
 Henstock, Ralph. Division spaces, vector-valued functions and backwards martingales. (82i:60091)
 Mawhin, Jean. Generalized multiple Perron integrals and the Green-Goursat theorem for differentiable vector fields. (82m:26010)

26A42 Integrals of Riemann, Stieltjes and Lebesgue type [See also 28-XX.]

- Bzoch, R. (with Morrell, J. S.) Concerning the existence of the double Stieltjes mean σ -integral. 82m:26008
 Cabras, A. (with Racugno, W.) Equivalence of the Weierstrass and Lebesgue integrals in the problem of the integrability of compound functions. (Italian. English summary) 82m:26009
 Chaffield, J. A. Product integration and eigenvalues. 82a:26007
 Das, A. G. (with Lahiri, B. K.) On RS_1 integrals. 82g:26013
 Henstock, Ralph. Generalized Riemann integration and an intrinsic topology. 82h:26010
 Lahiri, B. K. See Das, A. G., 82g:26013
 Mawhin, Jean. Generalized multiple Perron integrals and the Green-Goursat theorem for differentiable vector fields. 82m:26010
 McLeod, Robert M. ★ The generalized Riemann integral. 82h:26015
 Morrell, J. S. See Bzoch, R., 82m:26008
 Racugno, W. See Cabras, A., 82m:26009
 Ross, Kenneth A. Another approach to Riemann-Stieltjes integrals. 82h:26011
 Satyanarayana, Upadhyayula V. A note on Riemann-Stieltjes integrals. 82h:26012
 Smith, Edwin Shelby. A comparison of the Riemann-complete and Lebesgue integrals. 82h:26016
 Steib, Michael Lee. A Cauchy type condition and integrability. 82h:26017

secondary classifications:

- Demuth, Oswald (with Kmínek, V.) Properties of indefinite constructive Lebesgue-Stieltjes integrals. (Russian) (82d:03097)
 Kmínek, V. See Demuth, Oswald, (82d:03097)
 Navrátil, Jiří. A note on the theorem on change of variable in a Riemann integral. (Czech. English summary) (82i:26001)
 Nott, David. Definite integrals of generalized functions. (82a:46040)
 Spring, David. The Riemann integral in constructive mathematics. (82k:03097)
 Stromberg, Karl R. ★ Introduction to classical real analysis. (82c:26002)
 Vinogradova, I. A. Fourier coefficients of functions integrable in the sense of a generalized integral. (Russian) (82c:42006)

26A45 Functions of bounded variation, generalizations

- Baiada, Emilio (with Flocchi, Cristina) Classification of functions of several variables. (Italian) 82h:26018
 Flocchi, Cristina. See Baiada, Emilio, 82h:26018
 Goffman, Casper (with Liu, Feng Ché; Waterman, Daniel) A remark on the spaces V_{∞}^{∞} . 82i:26004
 Liu, Feng Ché. See Goffman, Casper; et al., 82i:26004
 Waterman, Daniel. See Goffman, Casper; et al., 82i:26004

secondary classifications:

- Brandi, Primo. A spectrum of weighted variations in subsets of \mathbb{R} . Semicontinuity theorems. (Italian) (82d:49038)
 Geman, D. (with Horowitz, Joseph) Smooth perturbations of a function with a smooth local time. (82j:60142)
 Horowitz, Joseph. See Geman, D., (82j:60142)
 Krotov, V. G. On differentiability of functions from L^p and H^p for $0 < p < 1$. (Russian) (82f:26007)
 Pu, H. H. See Pu, H. W., (82g:26010)
 Pu, H. W. (with Pu, H. H.) On the derivative of a nondecreasing function. (82g:26010)

26A46 Absolutely continuous functions

- Goffman, Casper. A geometric characterization of bounded variation and absolute continuity. 82m:26011

secondary classifications:

- De, A. K. See Sarkhel, D. N., (82h:26014)
 Giacalone, Angela (with Gori Cocchieri, Candida) A characterization of differentiability in a generalized sense of mappings with values in Banach spaces. (Italian) (82k:26018)
 Gori Cocchieri, Candida See Giacalone, Angela, (82k:26018)
 Sarkhel, D. N. (with De, A. K.) The proximally continuous integrals. (82h:26014)

26A48 Monotonic functions, generalizations

- Kłosińska, Wiktoria Preservation of density points by the limit function. (Polish and Russian summaries) 82g:26014
 Lindner, Wanda On the convergence in measure of a sequence of monotone functions. (Polish and Russian summaries) 82j:26006

secondary classifications:

- Diržaijan, M. M. (with Saakjan, B. A.) Expansions in series of generalized absolutely monotone functions. (Russian. English summary) (82k:41024)
 Pečarić, Josip E. See Vasić, Petar M., (82j:26020)
 Saakjan, B. A. See Diržaijan, M. M., (82k:41024)
 Vasić, Petar M. (with Pečarić, Josip E.) On the Jensen inequality for monotone functions. II. (82j:26020)

26A51 Convexity, generalizations

- Choczewski, Bogdan (with Powgżka, Zbigniew) Generalized subadditivity and convexity. 82d:26006
 Cross, G. E. Some conditions for n -convex functions. 82f:26010
 Dem'janov, V. F. (with Šomesova, V. K.) Conditional subgradients and conditional subdifferentials of convex functions. (Russian) (See 82f:90002)
 Ferland, Jacques A. Matrix-theoretic criteria for the quasiconvexity of twice continuously differentiable functions. 82k:26006
 Heiflic, A. I. Analytic properties of functions of convex relative solutions of second-order differential equations. (Russian) 82j:26009
 Jeter, Melvyn W. The infimum of a superadditive, n -homogeneous function. 82c:26010
 Kolumbas, I. Das Prinzip der Kondensation der Singularitäten präkonvexer Funktionen. 82c:26019
 Lacković, Ivan B. (with Vasić, Petar M.) Notes on convex functions. III. On the Fourier coefficients of a convex function. 82a:26009b
 See also Vasić, Petar M., 82a:26009a and Mitrinović, Dragoslav S.; et al., 82c:26011
 Mitrinović, Dragoslav S. (with Lacković, Ivan B.; Stanković, Miomir S.) Addenda to: *Analytic inequalities* [Springer, New York, 1970; MR 43 #448] by Mitrinović. 82c:26011
 Omieciński, Jan On convex homeomorphisms transforming a denumerable set onto a denumerable set. (Russian summary) 82a:26005
 Powgżka, Zbigniew See Choczewski, Bogdan, 82d:26006
 Soltan, V. P. An axiomatic approach to the theory of convex functions. (Russian) 82a:26008
 Šomesova, V. K. See Dem'janov, V. F., (See 82f:90002)
 Stanković, Miomir S. See Mitrinović, Dragoslav S.; et al., 82c:26011
 Vasić, Petar M. (with Lacković, Ivan B.) Notes on convex functions. II. On continuous linear operators defined on a cone of convex functions. 82a:26009a
 See also Lacković, Ivan B., 82a:26009b

secondary classifications:

- Arutjunov, A. V. Convexity properties of the Legendre transformation. (Russian) (82h:52010)
 Inoru, Christopher O. A note on series inequalities involving convex functions. (82j:26019)
 Ivan, Floarea Convex sum functions. (Romanian) (82a:28006)
 Klamkin, Murray S. Inequalities for inscribed and circumscribed polygons. (82c:52008)
 Kocić, Ljubiša M. See Lacković, Ivan B., (82g:26025)
 Lacković, Ivan B. (with Kocić, Ljubiša M.) Invariant transformations of some sequence classes. (Serbo-Croatian summary) (82g:26025)
 Milovanović, Igor Ž. A generalization of an inequality of A. Meir. (Serbo-Croatian summary) (82k:26015)
 See also Stanković, Ljubomir R., (82g:26028)
 Pečarić, Josip E. See Vasić, Petar M., (82d:26014) and Vasić, Petar M., (82j:26020)
 Stanković, Ljubomir R. (with Milovanović, Igor Ž.) Some inequalities for convex functions. (Serbo-Croatian summary) (82g:26028)
 Vasić, Petar M. (with Pečarić, Josip E.) On the Jensen inequality for monotone functions. II. (82j:26020)
 (with Pečarić, Josip E.) Notes on some inequalities for convex sequences and for k -convex functions. (82d:26014)

26A99 None of the above, but in this section

- Cristian, Bruteanu (with Tevy, Ionel) On characterizing connected functions. 82g:26015
 Mihalin, G. O. A property of a class of Stieltjes integrals. (Russian) 82m:26012
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 Thorpe, B. A Cauchy criterion for the summability of an infinite integral. 82a:26010
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secondary classifications:

- Alicu, Mira-Cristiana (with Mark, Otilia) Some properties of the fixed points set for multifunctions. (Romanian summary) (82k:54066)
 Avraham, Uri (with Shelah, Saharon) Martin's axiom does not imply that every two

\aleph_1 -dense sets of reals are isomorphic. (82a:03048)

- Iseki, Kaneshiro A summation method for linearly ordered series. (82d:40012)
 Kojecká, Jitka On some properties of functions relative to the classes of certain factor spaces. (Czech and Russian summaries) (82a:34008)
 Mark, Otilia See Alicu, Mira-Cristiana, (82k:54066)
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 Shelah, Saharon See Avraham, Uri, (82a:03048)

26Bxx Functions of several variables

26B05 Continuity and differentiation questions

- Aversa, Vincenzo On a condition of almost everywhere differentiability. (Italian. English summary) 82f:26011
 Baba-Zade, M. A. A class of continuous functions of two variables. (Russian) 82f:26012
 Carrese, Rosalba On the regular differentiability of functions of n variables. (Italian. English summary) 82f:26013
 Graves, William H. Vector-valued measures. (See 82g:28002)
 Milman, David The central function of the boundary of a domain and its differentiable properties. 82c:26007
 Nienhuys, J. W. Uniform continuity of derivatives in convex sets. 82a:26011
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 Šilov, G. E. ★Дифференцирование функций: высшие производные и вариационное исчисление. (Russian) [Differentiation of functions: higher derivatives and calculus of variations] 82j:26010
 Skórnik, Krystyna On the theory of local derivatives. (Russian) 82c:26008
 (Zabrejko, P. P.) See Šilov, G. E., 82j:26010

secondary classifications:

- Albano, Luigi (with Fedele, N.) On the existence of a primitive of a measurable function. (Italian) (82c:28006)
 Dem'janov, V. F. The relation between the Clarke subdifferential and a quasidifferential. (Russian. English summary) (82c:58012)
 Fabian, Marian Differentiability via one-sided directional derivatives. (82i:58013)
 Fedele, N. See Albano, Luigi, (82c:28006)
 Kusraev, A. G. On a general method of subdifferentiation. (Russian) (82i:58014)
 Peral Alonso, Irene Results on certain maximal operators by the method of rotation. (Spanish) (82c:42018)
 Šteĥorskii, A. I. Some differential properties of holomorphic mappings. (Russian) (82a:32012)
 Some boundary and solid properties of holomorphic functions in C^n . (Russian) (82b:32009)
 Szegő, G. P. (with Treccani, Giulio) What you should know about real-valued functions but were afraid to ask. (82c:58019)
 Szulkin, Andrzej Local structure of the zero-sets of differentiable mappings and application to bifurcation theory. (82d:58014)
 Treccani, Giulio See Szegő, G. P., (82c:58019)

26B10 Implicit function theorems, Jacobians, transformations with several variables

- Biswas, A. Extensions of two theorems of S. Kurepa. (Serbo-Croatian summary) 82f:26015
 Chi, Zong Tao (with Qi, Li Qun) Some global inverse function theorems. (Chinese) 82c:26009
 (Kurepa, S.) See Biswas, A., 82f:26015
 Qi, Li Qun See Chi, Zong Tao, 82c:26009

secondary classifications:

- Bolotov, V. A. (with Šolhet, D. M.) Estimate of the remainder term of an analogue of Taylor's formula for systems of implicit functions. (Russian) (82c:58010)
 (Jittorntrum, K.) See Kumagai, S., (82f:58012)
 Kumagai, S. Technical comment to: "An implicit function theorem" [J. Optim. Theory Appl. 25 (1978), no. 4, 575-577; MR 80b:26018] by K. Jittorntrum. (82f:58012)
 Sandberg, Irwin W. Global inverse function theorems. (82c:58015)
 Šilov, G. E. ★Дифференцирование функций: приложения к анализу. (Russian) «Дифференцирование функций: приложения к анализу» (82j:58016)
 Šolhet, D. M. See Bolotov, V. A., (82c:58010)

26B12 Calculus of vector functions

- Bogovskii, M. E. Solutions of some problems of vector analysis, associated with the operators div and grad. (Russian) 82m:26014
 Brun, Louis (with Mangin, Jean-Paul) Extension aux domaines bornés ou non d'une formule de Poincaré. (English summary) 82c:26010
 Churlton, F. Scalar and vector fields considered fundamentally. 82c:26013
 González-Velasco, Enrique A. On the concept of divergence. 82m:26015
 Mangin, Jean-Paul See Brun, Louis, 82c:26010
 Tamm, Ebu A formula for transforming a multidimensional integral. (Russian) 82h:26013

secondary classifications:

- Bishop, Richard L. (with Goldberg, Samuel I.) ★Tensor analysis on manifolds. (82g:53001)
 Drašković, Zoran V. On invariance of integration in Euclidean space. (82j:53026)
 Goldberg, Samuel I. See Bishop, Richard L., (82g:53001)

- Mosolov, B. G. Integral theorems of polyvector analysis. (Russian) (82a:53012)
 Vujčić, V. Covariant differentiation of a scalar over a vector. (Serbo-Croatian) (82e:53031)

26B15 Integration: length, area, volume [See also 28A75, 51M25.]

- Chien, Wen Jen An elementary proof of a theorem for changing variables in multiple integrals. 82e:26011

secondary classifications:

- Collet, Pierre (with Eckmann, Jean-Pierre; Koch, Hans) Period doubling bifurcations for families of maps on \mathbb{R}^n . (82i:58052)
 Eckmann, Jean-Pierre See Collet, Pierre; et al., (82i:58052)
 Koch, Hans See Collet, Pierre; et al., (82i:58052)
 Landis, E. E. Estimates of the variations of lesser value sets of a smooth function in the neighborhood of a minimum point. (Russian. English summary) (82b:32010)

26B20 Integral formulas (Stokes, Gauss, Green, etc.)

- de Guzmán, Miguel A change-of-variables formula without continuity. 82c:26014
 Poznjak, E. G. (with Šikin, E. V.) Green's formula for domains with rectifiable boundary. (Russian) 82c:26015
 Šikin, E. V. See Poznjak, E. G., 82c:26015

26B25 Convexity, generalizations

- Alsina, Claudi On a family of functional inequalities. 82c:26012
 Behringer, Fred Alois (with Walberer, Rainhard) On continuous quasiconvex functions. (German and Russian summaries) 82i:26006
 Debreu, Gérard (with Koopmans, Tjalling C.) Sur la décomposition additive des fonctions quasiconvexes. (English summary) [On the additive decomposition of quasiconvex functions] 82m:26016
 Degani Cattelani, F. The spectrum of simple and ordinate nonconvexity for the Ljapunov set in infinite dimension. (Italian) 82b:26014
 Klima, Vlastimil (with Netuka, Ivan) Smoothness of a typical convex function. 82j:26011
 Koopmans, Tjalling C. See Debreu, Gérard, 82m:26016
 Maruşciac, Ioan On αm -linear functions. 82a:26012
 Netuka, Ivan See Klima, Vlastimil, 82j:26011
 Popoviciu, Elena Sous-ensembles remarquables d'un ensemble interpolatoire. 82d:26007
 Rohn, Jiří An existence theorem for systems of nonlinear equations. 82f:26016
 Spingarn, Jonathan E. Submonotone subdifferentials of Lipschitz functions. 82g:26016
 Thibault, Lionel Cônes tangents et épi-différentiels de fonctions vectorielles. 82b:26015
 Walberer, Rainhard See Behringer, Fred Alois, 82i:26006

secondary classifications:

- Breckner, Wolfgang W. (with Orbán, Gheorghe) ★Continuity properties of rationally s -convex mappings with values in an ordered topological linear space. (82a:46007)
 Friedland, Shmuel Convex spectral functions. (82d:15014)
 Ger, Roman Homogeneity sets for Jensen-convex functions. (82d:39007)
 Hoffman, Karla Leigh A method for globally minimizing concave functions over convex sets. (82a:90116)
 Maerpois, L. S. Regularized types of convex and entire functions of several variables. (Russian) (82c:32003)
 Nikodem, Kazimierz On convex stochastic processes. (82i:60053)
 Orbán, Gheorghe See Breckner, Wolfgang W., (82a:46007)
 Pečarić, Josip E. On an inequality of N. Levinson. (Serbo-Croatian summary) (82i:26014)
 Schaible, Siegfried (with Zang, Israel) On the convexifiability of pseudoconvex C^1 -functions. (82a:90124)
 Zang, Israel See Schaible, Siegfried, (82a:90124)

26B30 Absolutely continuous functions, functions of bounded variation

secondary classifications:

- Broch, R. (with Morrell, J. S.) Concerning the existence of the double Stieltjes mean σ -integral. (82m:26008)
 Morrell, J. S. See Broch, R., (82m:26008)
 Sevast'yanov, E. A. On multidimensional variations of functions. (Russian) (82m:26013)
 Suquet, Pierre-M. Fonctions à variation bornée sur un ouvert de \mathbb{R}^N . (82f:46032)

26B35 Special properties of functions of several variables, Hölder conditions, etc.

- Belna, Charles (with Cowell, Peter; Cornette, James) The special 3-segment property. (Russian summary) 82c:26008
 Cornette, James See Belna, Charles; et al., 82c:26008
 Cowell, Peter See Belna, Charles; et al., 82c:26008
 Grande, Zbigniew Sur une propriété des fonctions de deux variables. 82j:26012
 Kaufman, Robert P. A singular map of a cube onto a square. 82a:26013
 Maher, Laurence P., Jr. A function which transforms certain graphs into straight lines for simultaneous solution. 82a:26014

secondary classifications:

- Álvarez Alonso, Josefina The distribution function in the Morrey space. (82c:46042)
 Baba-Zade, M. A. A class of continuous functions of two variables. (Russian) (82f:26012)
 Besov, O. V. Weight estimates of mixed derivatives in a domain. (Russian) (82c:46049)
 Ioffe, Alexandre D. Sous-différentielles approchées de fonctions numériques. (English summary) (82c:49026)

- Milne, Stephen C. Peano curves and smoothness of functions. (82c:26017)

26B40 Representation and superposition of functions

- Buck, R. Creighton Characterization of classes of functions. 82f:26017
 von Golitschek, Manfred Remarks on functional representation. 82g:26017
 Kuhn, Harald (with Schrempf, Wolfgang) Superposition stetiger Abbildungen. 82b:26016
 Martenkov, S. S. A method of analysis of superpositions of continuous functions. (Russian) 82c:26013
 le Mehaute, Alain Explicit C^∞ -extensions of functions of two variables in a strip between two curves, or in a corner, in \mathbb{R}^2 . 82j:26013
 Neuman, František Functions of two variables and matrices involving factorizations. 82c:26014
 Schrempf, Wolfgang See Kuhn, Harald, 82b:26016
 Sternfeld, Y. Superpositions of continuous functions. 82d:26008
 Volokitin, E. P. Representation of continuous piecewise-affine functions. (Russian) 82b:26020

secondary classifications:

- Mosznar, Zenon Sur les groupes de fonctions. (82i:20006)

26B99 None of the above, but in this section

- Bušmakin, V. N. (with İvanel, V. K.) Obreškov's formula for functions having discontinuities of the first kind. (Russian) 82c:26016
 İvanel, V. K. See Bušmakin, V. N., 82c:26016
 Kannai, Yakar An elementary proof of the no-retraction theorem. 82i:26007
 Layek, A. K. (with Mukhopadhyay, S. N.) Intersection of sectorial cluster sets and directional essential cluster sets. 82c:26017
 Mukhopadhyay, S. N. See Layek, A. K., 82c:26017
 Tšier, J. On strict preponderant maxima. 82c:26009

secondary classifications:

- Grande, Zbigniew Sur les fonctions de deux variables équi continues par rapport à une variable. (82c:28007)
 Hovanskii, A. G. A class of systems of transcendental equations. (Russian) (82a:14006)
 Karpuskin, V. N. The number of complement components for the level hypersurface of a harmonic polynomial. (Russian. English summary) (82m:14026)
 Kulawik, Maciej Continuous and semicontinuous solutions of a functional equation. (Polish. Russian and English summaries) (82g:39005)
 Kurata, Masahiro See Shiraiwa, Kenichi, (82g:58061)
 Ludlow-Wiechers, J. The C^1 preparation theorem and local description of zeros of functions. (Spanish) (82a:58010)
 Mikkelsen, Ruth L. Totally and partially ambiguous points of planar functions. (82b:30033)
 Rudin, Walter Lebesgue's first theorem. (82i:28006)
 Shiraiwa, Kenichi (with Kurata, Masahiro) A generalization of a theorem of Maroto. (82g:58061)

26Cxx Polynomials, rational functions

secondary classifications:

- Dobbs, David E. (with Hanks, Robert) ★A modern course on the theory of equations. (82c:00003)
 Hanks, Robert See Dobbs, David E., (82c:00003)

26C05 Polynomials: analytic properties, inequalities, etc.

- Akritis, Alkiviadis G. Exact algorithms for the implementation of Cauchy's rule. 82m:26017
 Bronštein, M. D. Smoothness of roots of polynomials depending on parameters. (Russian) 82c:26018
 Szabados, József (with Varma, A. K.) Inequalities for derivatives of polynomials having real zeros. 82b:26017
 Varma, A. K. Derivatives of polynomials with positive coefficients. 82j:26014
 See also Szabados, József, 82b:26017

secondary classifications:

- Boyd, David W. Reciprocal polynomials having small measure. (82a:30005)
 Čviř, M. M. Asymptotic properties of generalized Faber polynomials of two variables and of orthogonal polynomials connected with them. (Russian) (82g:33024)
 Erdős, Paul Some notes on Turán's mathematical work. (82f:01091)
 Turán, Pál See Erdős, Paul, (82f:01091)
 Vituškin, A. G. Approximation of entire functions and signal coding with finite spectrum. (Russian) (82b:30024)

26C10 Polynomials: location of zeros [See also 12D10, 30C15, 65H05.]

- Akritis, Alkiviadis G. A correction on a theorem by Uspensky. 82j:26015
 An implementation of Vincent's theorem. 82d:26009
 Desimirova, L. K. On the distribution of the real zeros of a class of functions with a distinguished kernel. (Bulgarian. Russian and German summaries) 82a:26015
 Jury, E. I. (with Mansour, M.) Positivity and nonnegativity conditions of a quartic equation and related problems. 82c:26016
 Mansour, M. See Jury, E. I., 82c:26016

secondary classifications:

- Di Lena, G.** A fixed-point theorem intended for the calculation of real zeros of a function. (Italian. English summary) (82f:26004)
Farrell, E. J. A result on co-chromatic graphs. (82d:05059)
László, Lajos Matrix methods for polynomials. (82c:15011)
Postnikov, M. M. ★Устойчивые многочлены. (Russian) [Stable polynomials] (82c:12023)

26C15 Rational functions [See also 14G30.]

- Abrahamse, M. B.** (with Fisher, S. D.) Mapping intervals to intervals. 82i:26008
Fisher, S. D. See **Abrahamse, M. B.**, 82i:26008

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26Dxx Inequalities (For maximal function inequalities, see 42B25; for functional inequalities, see 39C05.)

secondary classifications:

- (Beckenbach, Edwin F.) See **General inequalities**, (82h:00004)
Conference:
General Inequalities ★General inequalities. 2. (82h:00004)
General inequalities ★General inequalities. 2. (82h:00004)
Oberwolfach ★General inequalities. 2. (82h:00004)

26D05 Inequalities for trigonometric functions and polynomials

- Acu, Dumitru** Generalizations of some inequalities. (Serbo-Croatian summary) 82i:26009
Arestov, V. V. Integral inequalities for trigonometric polynomials and their derivatives. (Russian) 82c:26019
Borwein, Peter B. Markov's and Bernstein's inequalities on disjoint intervals. 82g:26018
Dyn'kin, E. M. See **Podkorytov, A. N.**, 82d:26010
Gavrea, I. On some inequalities for polynomials. (Romanian. English summary) 82k:26010
Goetheluck, Pierre Inégalité de Markov dans les ensembles effilés. 82g:26019
Harris, Lawrence A. An inequality for trigonometric polynomials. 82m:26018
Jahne, Thomas Those logarithmic inequalities again. 82j:26016
Podkorytov, A. N. (with Dyn'kin, E. M.) Inequality in L^p of V. A. Markov type. (Russian) 82d:26010

secondary classifications:

- Aziz, Abdul** (with Mohammad, Q. G.) Growth of polynomials with zeros outside a circle. (82c:30005)
Durand, Alain Relation de Szegő sur la dérivée d'un polynôme. (82c:30011)
Elfroyson, Gustave A. (with Swartz, Blair; Wendroff, Burton) A new inequality for symmetric functions. (82c:58018)
Jamiołkowski, Andrzej On semipositive definiteness of $2n$ -degree forms. (82j:82022)
Lacković, Ivan B. (with Vasić, Petar M.) Notes on convex functions. III. On the Fourier coefficients of a convex function. (82a:26009b)
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Swartz, Blair See **Elfroyson, Gustave A.**; et al., (82c:58018)
Varma, A. K. Derivatives of polynomials with positive coefficients. (82j:26014)
Vasić, Petar M. See **Lacković, Ivan B.**, (82a:26009b)
Wendroff, Burton See **Elfroyson, Gustave A.**; et al., (82c:58018)

26D10 Inequalities involving derivatives and differential and integral operators

- Aširov, S.** See **Mamedov, Ja. D.**; et al., 82i:26011
Atdaev, S. See **Mamedov, Ja. D.**; et al., 82i:26011
Bhise, V. M. See **Dighe, Madhavi**, 82h:26022
Bondge, B. K. (with Pachpatte, B. G.) On some fundamental integral inequalities in n independent variables. 82i:26010
 (with Pachpatte, B. G.) On some partial integral inequalities in two independent variables. 82h:26021
 (with Pachpatte, B. G.) On two independent variable generalizations of certain integral inequalities. 82k:26011
Burenkov, V. I. Exact constants in inequalities for norms of intermediate derivatives on a finite interval. (Russian) 82g:26020
Burlachenko, V. P. (with Sidenko, M. I.) A generalization of the Wendroff inequality. (Russian) 82g:26021
Dighe, Madhavi (with Bhise, V. M.) On the generalisation of Beesack's extension of Opial's inequality. 82h:26022
 (Fehér, F.) See **Mohapatra, Ram Narayan**, 82d:26011
Kwong, Man Kam (with Zettl, A.) Ramifications of Landau's inequality. 82e:26015
 (with Zettl, A.) Norm inequalities of product form in weighted L^p spaces. 82k:26012
Lupaş, Alexandru Inequalities for divided differences. (Serbo-Croatian summary) 82j:26017
Mamedov, Ja. D. (with Aširov, S.; Atdaev, S.) ★Теоремы о неравенствах. (Russian) [Theorems on inequalities] 82i:26011
Milovanović, Gradimir V. (with Milovanović, Igor Ž.) The best constant in some integral inequalities of Opial type. (Serbo-Croatian summary) 82k:26013
Milovanović, Igor Ž. See **Milovanović, Gradimir V.**, 82k:26013
Mohapatra, Ram Narayan Remarks on a generalization of the Schur-Hardy inequality. 82d:26011
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On some partial integral inequalities in n independent variables. 82f:26018

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Raghavendra, V. A remark on an integral inequality. 82g:26023

Sidenko, M. I. See **Burlachenko, V. P.**, 82g:26021

Singare, S. M. (with Pachpatte, B. G.) On certain discrete inequalities of the Wendroff type. 82i:26019

Singare, V. M. (with Pachpatte, B. G.) Lower bounds on some integral inequalities in n independent variables. 82e:26016

Zettl, A. See **Kwong, Man Kam**, 82e:26015 and 82k:26012

secondary classifications:

- Agarwal, Ravi P.** Error estimates in polynomial interpolation. (82f:41004)
Goetheluck, Pierre Inégalité de Markov dans les ensembles effilés. (82g:26019)
Kurpel', M. S. (with Šušar, B. A.) ★Двусторонние операторные неравенства и их приложения. (Russian) [Two-sided operator inequalities and their applications] (82j:47002)
Lacković, Ivan B. See **Vasić, Petar M.**, (82a:26009a)
Maligranda, Lech Generalized Hardy inequalities in rearrangement invariant spaces. (82j:47052)
Okikiola, George Olatunmbi Weighted inequalities for convolutions and homogeneous convolutions. (82i:44006)
 Weighted form of a general inequality. (82i:44007)
Pachpatte, B. G. On some new integral inequalities for nonselfadjoint hyperbolic partial integro-differential equations. (82a:45018)
 See also **Singare, V. M.**, (82e:45012)
Singare, V. M. (with Pachpatte, B. G.) On certain partial integro-differential inequalities and their applications. (82e:45012)
Šušar, B. A. See **Kurpel', M. S.**, (82j:47002)
Szabados, József (with Varma, A. K.) Inequalities for derivatives of polynomials having real zeros. (82h:26017)
Varma, A. K. See **Szabados, József**, (82h:26017)
Vasić, Petar M. (with Lacković, Ivan B.) Notes on convex functions. II. On continuous linear operators defined on a cone of convex functions. (82a:26009a)

26D15 Inequalities for sums, series and integrals

- Andersen, Kenneth F.** Weighted inequalities for the Stieltjes transformation and Hilbert's double series. 82b:26020
Bainov, D. D. See **Zahariev, Andrei**, 82h:26023
Batjaev, B. G. Dependent double linear inequalities. (Russian) (See 82m:34004)
Beesack, Paul R. (with Heinig, Hans P.) Hardy's inequalities with indices less than 1. 82j:26018
Čoršanbaev, I. See **Nurimov, T.**, 82a:26017
Cusnariu, Adolf A proof of the arithmetic mean-geometric mean inequality. 82g:26024
Elbert, Á. On Wilkins' inequality. 82i:26020
 (Fan, Ky) See **Pečarić, Josip E.**, 82d:26013
Guseinov, E. G. Marchaud's theorem on the relation between moduli of smoothness in L_2 . (Russian) 82k:26014
Heinig, Hans P. See **Beesack, Paul R.**, 82j:26018
Imoru, Christopher O. A note on series inequalities involving convex functions. 82j:26019
Johnson, P. D., Jr. (with Mohapatra, Ram Narayan) Inequalities involving lower-triangular matrices. 82h:26021
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Kocić, Ljubiša M. See **Lacković, Ivan B.**, 82g:26025
Lacković, Ivan B. (with Kocić, Ljubiša M.) Invariant transformations of some sequence classes. (Serbo-Croatian summary) 82g:26025
(Lorentz, G. G.) See **Pečarić, Josip E.**, 82d:26013
Magarić-Il'jaev, G. G. (with Tibomirov, V. M.) On the Kolmogorov inequality for fractional derivatives on the half line. (Russian summary) 82g:26026
Milne, Stephen C. Peano curves and smoothness of functions. 82e:26017
Milovanović, Igor Ž. A generalization of an inequality of A. Meir. (Serbo-Croatian summary) 82k:26015
 See also **Stanković, Ljubomir R.**, 82g:26028
Mitrinović, Dragoslav S. (with Kalajdžić, G.) On an inequality. (Serbo-Croatian summary) 82m:26019
Mohapatra, Ram Narayan See **Johnson, P. D., Jr.**, 82h:26021
Neta, Beny On three inequalities. 82d:26012
Nurimov, T. (with Čoršanbaev, I.) A study of certain classes of two-dimensional integral inequalities. (Russian) 82a:26017
Pachpatte, B. G. On Wendroff type partial integral inequalities. 82h:26022
Pečarić, Josip E. On an inequality of T. Popoviciu. I, II. 82m:26020
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 On some inequalities analogous to Grüss' inequality. 82e:26018
 Notes on some inequalities of P. M. Vasić. 82i:26021
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 See also **Vasić, Petar M.**, 82d:26014 and 82j:26020
Sadičova, R. H. Inequalities for sourcelike representable functions. (Russian) 82e:26020
Shan, Zun A class of inequalities. (Chinese) 82m:26023
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Skarda, Vencil I_1 -bounds for inner products. 82g:26027b
 I_1 -bounds for inner products. 82g:26027a
Stanković, Ljubomir R. (with Milovanović, Igor Ž.) Some inequalities for convex

- functions. (Serbo-Croatian summary) **82g:26028**
- Steinig, J. Inequalities involving convex sequences. **82c:26016**
- Stredulinsky, E. W. Higher integrability from reverse Hölder inequalities. **82m:26024**
- Thomirov, V. M. See Magariĭ-Iĭjaev, G. G., **82g:26026**
- Vasić, Petar M. (with Pečarić, Josip E.) On the Jensen inequality for monotone functions. II. **82j:26020**
- (with Pečarić, Josip E.) Notes on some inequalities for convex sequences and for k -convex functions. **82d:26014**
- Wang, Chung Lie. Functional equation approach to inequalities. II. **82j:26021a**
- A generalization of the HGA inequalities. **82c:26013**
- Functional equation approach to inequalities. III. **82j:26021b**
- Zahariev, Andrei (with Bainov, D. D.) A note on Bellman-Gronwall's inequality. **82h:26023**

secondary classifications:

- Agarwal, Ravi P. (with Thandapani, E.) On nonlinear discrete inequalities of Gronwall type. **(82f:39001)**
- Alcina, Claudi. On a family of functional inequalities. **(82c:26012)**
- Andersen, Kenneth F. (with John, Russel T.) Weighted inequalities for vector-valued maximal functions and singular integrals. **(82b:42015)**
- Arestov, V. V. Integral inequalities for trigonometric polynomials and their derivatives. (Russian) **(82c:26019)**
- Batty, C. J. K. (with Bollmann, H. W.) Generalised Holley-Preston inequalities on measure spaces and their products. **(82a:60019)**
- Beesack, Paul R. Minimum properties of eigenvalues—elementary proofs. **(82d:34027)**
- Bollmann, H. W. See Batty, C. J. K., **(82a:60019)**
- Chatterji, S. D. Some comments on the maximal inequality in martingale theory. **(82a:60068)**
- Fleischer, Wilhelm. Eine Ungleichung für konvexe Funktionen. [An inequality for convex functions] **(82j:52019)**
- Gadre, Shridhar R. (with Matcha, Robert L.) Inequalities among atomic expectation values. **(82c:81157)**
- Galambos, Janos (with Mucci, R.) Inequalities for linear combinations of binomial moments. **(82k:60036)**
- John, Russel T. See Andersen, Kenneth F., **(82b:42015)**
- Johnson, P. D., Jr. (with Mohapatra, Ram Narayan) Inequalities involving infinite matrices with nonnegative entries. **(82i:40012)**
- (with Mohapatra, Ram Narayan) Problems in the theory of infinite matrices. **(82i:40013)**
- Klass, Michael J. Precision bounds for the relative error in the approximation of $E[S_n]$ and extensions. **(82h:60097)**
- Kufner, Alois (with Triebel, Hans) A generalization of the Hardy inequality. (Russian) **(82d:46054)**
- Lacković, Ivan B. See Vasić, Petar M., **(82a:26009a)**
- Landsberg, P. T. A generalised mean suggested by the equilibrium temperature. **(82d:80002)**
- Lupaş, Alexandru. Inequalities for divided differences. (Serbo-Croatian summary) **(82j:26017)**
- Marcus, Marvin (with Moore, Kenneth) A determinant formulation of the Cauchy-Schwarz inequality. **(82b:15012)**
- Matcha, Robert L. See Gadre, Shridhar R., **(82c:81157)**
- Mohapatra, Ram Narayan. See Johnson, P. D., Jr., **(82i:40012)** and **(82i:40013)**
- Moore, Kenneth. See Marcus, Marvin, **(82b:15012)**
- Mucci, R. See Galambos, Janos, **(82k:60036)**
- Novotná, Jarmila. Discrete analogues of Wirtinger's inequality for a two-dimensional array. (Czech summary) **(82f:49049)**
- Thandapani, E. See Agarwal, Ravi P., **(82f:39001)**
- Triebel, Hans. See Kufner, Alois, **(82d:46054)**
- Vasić, Petar M. (with Lacković, Ivan B.) Notes on convex functions. II. On continuous linear operators defined on a cone of convex functions. **(82a:26009a)**

26D20 Other analytical inequalities

- Bareladze, T. P. B. S. Kašin's inequality. (Russian. Georgian and English summaries) **82k:26017**
- El-Newehi, Emad (with Proschan, Frank) Unified treatment of some inequalities among ratios of means. **82c:26021**
- Magnus, Arne. Jensen's inequality revisited: "A proof of Jensen's theorem by forward induction" [Nordisk Mat. Tidskr. 25/26 (1978), no. 3-4, 173-174; MR 82a:26018a] by A. J. Zajtá. (Norwegian. English summary) **82a:26018b**
- Pečarić, Josip E. On an inequality of N. Levinson. (Serbo-Croatian summary) **82i:26014**
- Proschan, Frank. See El-Newehi, Emad, **82c:26021**
- Stolarsky, Kenneth B. The power and generalized logarithmic means. **82g:26029**
- Zajtá, Aurel J. A proof of Jensen's theorem by forward induction. **82a:26018a**
- See also Magnus, Arne, **82a:26018b**

secondary classifications:

- Ahriata, J. P. Comment on a thermodynamic proof of the inequality between arithmetic and geometric mean. **(82b:80003)**
- Bhise, V. M. (with Dange, A. V.) Inequality for triple hypergeometric function. **(82c:33010)**
- Chernoff, Herman. A note on an inequality involving the normal distribution. **(82f:60050)**
- Dange, A. V. See Bhise, V. M., **(82c:33010)**
- Delbosco, Domenico. Sur une inégalité de la norme. (Serbo-Croatian summary) **(82i:46021)**
- Klankin, Murray S. Extensions of a triangle inequality of Carlitz. II. (Serbo-Croatian summary) **(82j:52020)**

- Landsberg, P. T. A thermodynamic proof of the inequality between arithmetic and geometric mean. **(82b:80002)**
- Pachpatte, B. G. On some fundamental n th order finite difference inequalities. **(82g:39010)**
- Popenda, Jerzy (with Werbowski, Jarosław) On the discrete analogy of Gronwall lemma. **(82g:39011)**
- Sidhu, S. S. On thermodynamic proofs of mathematical results. **(82b:80004)**
- Werbowski, Jarosław. See Popenda, Jerzy, **(82g:39011)**

26D99 None of the above, but in this section

- Daykin, David E. A hierarchy of inequalities. **82c:26019**

secondary classifications:

- Koskela, Mauri. Some generalizations of Clarkson's inequalities. **(82c:46035)**

26Exx Miscellaneous topics [See also 58Cxx.]

26E05 Real-analytic functions

secondary classifications:

- Rădulescu, Florin. Derivatives and analytic functions. **(82g:26011)**

26E10 C^∞ -functions, quasi-analytic functions

- Čan Dyk Van. A generalization of quasi-analytic classes of functions. (Russian) **82h:26023**

secondary classifications:

- Bruma, Joaquin. An algebra of quasianalytic functions. (Spanish. English summary) **(82d:46073)**
- Černjavskii, A. G. Quasianalytic analogues of some properties of harmonic functions. (Russian. Armenian summary) **(82j:31008)**

26E15 Calculus of functions on infinite-dimensional spaces

- Cobzas, Stefan. On the Lipschitz properties of continuous convex functions. **82c:26020**
- Flett, T. M. ★Differential analysis. **82c:26021**

secondary classifications:

- (Aron, Richard M.) See Nachbin, Leopoldo, **(82f:58002)**
- Hiriart-Urruty, J.-B. Lipschitz r -continuity of the approximate subdifferential of a convex function. **(82c:58007)**
- Ioffe, Alexandre D. Nonsmooth analysis: differential calculus of nondifferentiable mappings. **(82j:58018)**
- Kalton, N. J. Curves with zero derivative in F -spaces. **(82a:46002)**
- Michor, P. The division theorem on Banach spaces. **(82m:58008)**
- Nachbin, Leopoldo. ★Introduction to functional analysis: Banach spaces and differential calculus. **(82f:58002)**
- Nienhuys, J. W. Uniform continuity of derivatives in convex sets. **(82a:26011)**
- Suhinin, M. F. An inverse function theorem in locally convex spaces. (Russian) **(82a:58008)**

26E20 Calculus of functions taking values in infinite-dimensional spaces

- Gialcone, Angela (with Gori Cocchieri, Candida) A characterization of differentiability in a generalized sense of mappings with values in Banach spaces. (Italian) **82k:26018**
- Gori Cocchieri, Candida. See Gialcone, Angela, **82k:26018**

secondary classifications:

- Flett, T. M. ★Differential analysis. **(82c:26021)**
- Grande, Zbigniew (with Rzepka, Danuta) Sur le produit de deux dérivées vectorielles. **(82c:28009)**
- Rzepka, Danuta. See Grande, Zbigniew, **(82c:28009)**

26E25 Set-valued functions [See also 54C60.]

- Nurminkilä, E. A. On the differentiability of set-valued mappings. (Russian. English summary) **82d:26015**

secondary classifications:

- Graf, Siegfried. Measurable weak selections. **(82b:28020)**

26E30 Non-Archimedean analysis [See also 12J25.]

- Mahler, Kurt. On two definitions of the integral of a p -adic function. **82b:26024**
- Schikhof, W. H. p -adic monotone functions. **82b:26025**

secondary classifications:

- Mináč, Ján. Some counterexamples in p -adic analysis. (Russian summary) **(82f:12025)**

26E35 Nonstandard analysis [See also 03H05.]

- Henle, James M. (with Kleinberg, Eugene M.) ★Infinitesimal calculus. **82b:26026**
- Kleinberg, Eugene M. See Henle, James M., **82b:26026**
- Tall, David. The calculus of Leibniz—an alternative modern approach. **82f:26022**

secondary classifications:

- Barone, E. (with Giannone, Alberto; Scozzafava, Romano) On some aspects of the theory and applications of finitely additive probability measures. (82i:28001)
 Boyd, Michael W. (with Transue, William R.) Properties of ultraproducts. (82b:46021)
 Giannone, Alberto See Barone, E.; et al., (82i:28001)
 Jones, C. K. R. T. (with Kelemen, P. J.) The ρ -calculus. (82b:03105)
 Kelemen, P. J. See Jones, C. K. R. T., (82b:03105)
 Mejibo, Lars C. On nonstandard analysis. (Danish) (82b:03002)
 Raiković, Miodrag On existence of expansion of a complex function. (82d:30051)
 Scozzafava, Romano See Barone, E.; et al., (82i:28001)
 Transue, William R. See Boyd, Michael W., (82b:46021)

26E99 None of the above, but in this section

- Balasubramanian, K. Constancy of functions restricted to a subset. 82b:26027
 Torgaev, Aleksandar Extreme values of integrals of some bell shaped classes of functions. 82d:26016

secondary classifications:

- Bruna, Joaquim An extension theorem of Whitney type for non-quasi-analytic classes of functions. (82c:58024)
 Dayal, S. k -discrete differentials of certain operators on Banach spaces. (82j:58017)
 Hallum, C. R. See McMath, John S.; et al., (82d:65043)
 Hauck, Jürgen Stetigkeitseigenschaften berechenbarer reeller Funktionen. (82b:03107)
 Himisilavili, G. N. Level surfaces of a smooth function on a manifold with corners. (Russian. Georgian and English summaries) (82m:58007)
 McMath, John S. (with Sims, S. E.; Hallum, C. R.) A comparison of various derivatives for matrix-valued functions. (82d:65043)
 Merrien, Jean Applications des faisceaux analytiques semi-cobérents aux fonctions différentiables. (English summary) (82g:58015)
 Puri, Madan L. (with Ralescu, Dan A.) Différentielle d'une fonction floue. (English summary) [Differential of a fuzzy function] (82m:58006)
 Ralescu, Dan A. See Puri, Madan L., (82m:58006)
 Sims, S. E. See McMath, John S.; et al., (82d:65043)

28-XX MEASURE AND INTEGRATION (For analysis on manifolds, see 58-XX.)

28-01 Elementary exposition, textbooks

- Aliprantis, Charalambos D. (with Burkinshaw, Owen) ★Principles of real analysis. 82j:28001
 (Bögel, Karl) See Natanson, I. P., 82m:28002
 Burkinshaw, Owen See Aliprantis, Charalambos D., 82j:28001
 Floret, Klaus ★Maß- und Integrationstheorie. (German) [Measure and integration theory] 82m:28001
 George, Claude ★Exercices et problèmes d'intégration. (French) [Exercises and problems in integration] 82b:28001
 Natanson, I. P. ★Theorie der Funktionen einer reellen Veränderlichen. (German) [Theory of functions of a real variable] 82m:28002

secondary classifications:

- Alameddine, Ahmad Fawzi Directed graphs and convergence. (82m:05048)
 Bauer, Heinz ★Probability theory and elements of measure theory. (82k:60001)
 Binnore, K. G. ★The foundations of analysis: a straightforward introduction. Book 1. (82d:04001)
 (Burckel, R. B.) See Bauer, Heinz, (82k:60001)
 Chien, Wen Jen An elementary proof of a theorem for changing variables in multiple integrals. (82b:26011)
 Krieger, Henry A. ★Measure-theoretic probability. (82b:60001)
 (Lepa, Eugene) See Maurin, Krzysztof, (82i:00003)
 Maurin, Krzysztof ★Analysis. Part II. (82i:00003)
 McLeod, Robert M. ★The generalized Riemann integral. (82b:26015)
 (Rohlin, V. A.) See Titchmarsh, E. C., (82b:30001)
 Titchmarsh, E. C. ★Теория функций. (Russian) [The theory of functions] (82b:30001)

28-02 Advanced exposition (research surveys, monographs, etc.)

- Goguladze, D. F. ★Об интегралах Колмогорова и их некоторых приложениях. (Russian) [Kolmogorov integrals and some of their applications] 82g:28001
 (Goldin, Gerald A.) See Measure theory and its applications, 82g:28002
 (Wheeler, Robert F.) See Measure theory and its applications, 82g:28002

Conference:
 Measure Theory and its Applications ★Measure theory and its applications. 82g:28002

DeKalb, Ill. ★Measure theory and its applications. 82g:28002
 Measure theory and its applications ★Measure theory and its applications. 82g:28002

secondary classifications:

- (Lepa, Eugene) See Maurin, Krzysztof, (82i:00003)
 Maurin, Krzysztof ★Analysis. Part II. (82i:00003)
 Pachl, Jan K. Two classes of measures. (82b:28012)

28-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (Baire, René) See Correspondence: Baire, René, (82i:01041)
 (Borel, Émile) See Poliščuk, E. M., (82g:01067) and Correspondence: Baire, René, (82i:01041)
 (Denjoy, Arnaud) See Correspondence: Lévy, Paul, (82g:01034) and Correspondence: Baire, René, (82i:01041)
 (Fréchet, Maurice) See Correspondence: Lévy, Paul, (82g:01034)
 (Kunugi, Kinjirō) See Okano, Hattuo, (82i:01067)
 (Lévy, Paul) See Correspondence: Lévy, Paul, (82g:01034)
 (Luzin, N. N.) See Correspondence: Baire, René, (82i:01041)
 Medvedev, F. A. The axiom of choice and mathematical analysis. (Russian) (82i:01030)
 Okano, Hattuo Professor Kinjirō Kunugi's work and its developments on the theory of integration. (82i:01067)
 (Ostrowski, Alexander) See Correspondence: Lévy, Paul, (82g:01034)
 Poliščuk, E. M. ★Эммануэль Бораля (1871–1956). (Russian) [Émile Borel (1871–1956)] (82g:01067)
 (de la Vallée Poussin, Charles) See Correspondence: Baire, René, (82i:01041)
 (Volterra, Vito) See Correspondence: Baire, René, (82i:01041)
 Bibliography:
 Borel, Émile See Poliščuk, E. M., (82g:01067)
 Biography:
 Borel, Émile See Poliščuk, E. M., (82g:01067)
 Correspondence:
 Baire, René Lettres à René Baire. (82i:01041)
 Lévy, Paul Lettres à Paul Lévy. (82g:01034)

28-04 Explicit machine computation and programs (not the theory of computation or programming)

28-06 Proceedings, conferences, etc.

- (Katok, Anatole) See Ergodic theory and dynamical systems, 82i:28001
 College Park, Md. ★Ergodic theory and dynamical systems. I. 82i:28001
 Ergodic theory ★Théorie ergodique. (French) [Ergodic theory] 82b:28001
 Ergodic theory and dynamical systems ★Ergodic theory and dynamical systems. I. 82i:28001
 Les Plams-sur-Bex ★Théorie ergodique. (French) [Ergodic theory] 82b:28001
 Seminar:
 Ergodic Theory ★Théorie ergodique. (French) [Ergodic theory] 82b:28001

secondary classifications:

- (Goldin, Gerald A.) See Measure theory and its applications, (82g:28002)
 (Wheeler, Robert F.) See Measure theory and its applications, (82g:28002)
 Conference:
 Measure Theory and its Applications ★Measure theory and its applications. (82g:28002)
 DeKalb, Ill. ★Measure theory and its applications. (82g:28002)
 Measure theory and its applications ★Measure theory and its applications. (82g:28002)

28Axx Classical measure theory

28A05 Classes of sets (Borel fields, σ -rings, etc.), measurable sets, Suslin sets, analytic sets [See also 04A15, 26A21, 54H05.]

- Azcél, J. Functions partially constant on rings of sets. 82d:28001
 Blackwell, David Borel sets via games. 82c:28001
 Brzuchowski, Jan (with Cichoń, Jacek; Grzegorek, Edward; Ryll-Nardzewski, Czesław) On the existence of nonmeasurable unions. (Russian summary) 82b:28002
 Burgess, John P. (with Mauldin, R. Daniel) Conditional distributions and orthogonal measures. 82j:28002
 Capek, Peter On small systems. (Slovak and Russian summaries) 82b:28003
 Decomposition theorems in measure theory. (Russian summary) 82m:28003
 Cichoń, Jacek See Brzuchowski, Jan; et al., 82b:28002
 Dence, Thomas P. Density points of Cantor sets. 82b:28002
 Friedman, Harvey (with Talagrand, Michel) Un ensemble singulier. (English summary) 82d:28002
 Frólik, Zdeněk (with Holický, P.) Decomposability of completely Suslin-additive families. 82b:28003
 Grzegorek, Edward See Brzuchowski, Jan; et al., 82b:28002
 Holický, P. See Frólik, Zdeněk, 82b:28003
 Horáková, Galina (with Šipoš, Ján) A note on restricted measurability. (Russian summary) 82d:28003
 Mauldin, R. Daniel See Burgess, John P., 82j:28002
 Mazumdar, Anita Some properties of sets with positive measures. (Serbo-Croatian summary) 82k:28001
 Miller, Harry I. Some results connected with a problem of Erdős. II. 82c:28003
 (with Xenikakis, Polychronis J.) Some results connected with a problem of Erdős. (Serbo-Croatian summary) 82c:28002
 Nadkarni, M. G. (with Ramachandran, D.) On a question of D. Maharam concerning tail fields. 82d:28004
 Nougues-Sainte-Beuve, M.-F. Espaces de Lindelöf et quelques propriétés topologiques des espaces de mesures. 82m:28004
 Overdijk, D. A. (with Simons, F. H.; Thiemann, J. G. F.) A comment on unions of rings. 82c:28001
 Ramachandran, D. See Nadkarni, M. G., 82d:28004

- Ryll-Nardzewski, Czesław See Brzuchowski, Jan; et al., 82b:28002
 Simons, F. H. See Overdijk, D. A.; et al., 82c:28001
 Šipoš, Ján See Horáková, Galina, 82d:28003
 Talagrand, Michel Sur la mesure de la projection d'un compact et certaines familles de cercles. (English summary) 82b:28004
 See also Friedman, Harvey, 82d:28002
 Thiemann, J. G. F. See Overdijk, D. A.; et al., 82c:28001
 Xenikakis, Polychronis J. See Miller, Harry I., 82c:28002

secondary classifications:

- Brzuchowski, Jan (with Cichoń, Jacek; Węglorz, Bogdan) Some applications of strong Lusin sets. (82b:04003)
 Cenzer, Douglas (with Mauldin, R. Daniel) Inductive definability: measure and category. (82b:03006)
 Cichoń, Jacek See Brzuchowski, Jan; et al., (82b:04003)
 Dellacherie, Claude Capacities and analytic sets. (82j:54085)
 Erdős, Paul Some remarks on subgroups of real numbers. (82c:04004)
 Fabera, Jifí (with Sturm, Teo) Embedding of semilattices into distributive lattices. (82j:06011)
 Fremlin, D. H. Borel sets in nonseparable Banach spaces. (82g:46051)
 Frolík, Zdeněk See Holický, P., (82a:54072)
 Grzegorek, Edward (with Ryll-Nardzewski, Czesław) A remark on absolutely measurable sets. (Russian summary) (82f:54065)
 Solution of a problem of Banach on σ -fields without continuous measures. (Russian summary) (82b:04005)
 (with Ryll-Nardzewski, Czesław) On universal null sets. (82c:04001)
 Holický, P. (with Frolík, Zdeněk) Nonseparable analytic spaces and measurable correspondences. (Russian) (82a:54072)
 Kaufman, Robert P. Lipschitz spaces and Suslin sets. (82b:47005)
 Mauldin, R. Daniel See Cenzer, Douglas, (82b:03006)
 Miller, Harry I. A general partition theorem for sets of reals. (Serbo-Croatian summary) (82b:04004)
 Moschovakis, Yiannis N. ★Descriptive set theory. (82c:03002)
 Rice, Michael D. Uniform ideas in analysis. (82i:54070)
 Ryll-Nardzewski, Czesław See Grzegorek, Edward, (82c:04001) and (82f:54065)
 Steel, John R. Analytic sets and Borel isomorphisms. (82b:03091)
 Sturm, Teo See Fabera, Jifí, (82j:06011)
 Valdivia, Manuel On Suslin locally convex spaces. (Spanish. English summary) (82i:46020)
 Węglorz, Bogdan See Brzuchowski, Jan; et al., (82b:04003)

28A10 Real- or complex-valued set functions

- Aljakin, V. A. A property of a family of nonadditive set functions. (Russian) 82c:28002
 d'Arienzo, Emilia (with Franciosi, Michelangelo) On the extension of finitely additive functions. (Italian. English summary) 82c:28003
 Franciosi, Michelangelo See d'Arienzo, Emilia, 82c:28003
 Nikodem, Kazimierz On additive set-valued functions. 82b:28005
 Scozzafava, Romano Complete additivity, on suitable sequences of sets, of a simply additive and strongly nonatomic probability measure. (Italian. English summary) 82c:28004
 Stratigos, Panagiotis D. Extension of additive set-functions. 82i:28002

secondary classifications:

- Belley, J.-M. Bochner's theorem and the existence of invariant set functions. (82c:43016)
 Graf, Siegfried A note on realizing homomorphisms of category algebras. (82i:54071)
 Gutek, Andrzej On biconnected spaces without dispersion points. (82f:54083)
 Pasicki, Lech On the measures of noncompactness. (82f:54036)
 Rice, Michael D. Uniform ideas in analysis. (82i:54070)

28A12 Contents, measures, outer measures, capacities

- Alajbegović, Jusuf (with Kulenović, Mustafa; Miller, Harry I.; Radić, Mirko) On a result of Carathéodory. (Serbo-Croatian summary) 82a:28001
 Banon, G. Distinction between several subsets of fuzzy measures. 82i:28003
 Barone, E. (with Giannone, Alberto; Scozzafava, Romano) On some aspects of the theory and applications of finitely additive probability measures. 82f:28001
 Bell, Wayne C. (with Hagood, John W.) Separation properties of finitely additive measures and the Radon-Nikodým theorem. (See 82g:28002)
 Approximate Hahn decompositions, uniform absolute continuity and uniform integrability. 82g:28003
 Bierlein, Dieter Measure extensions and measurable neighbours of a function. 82b:28004
 Eisele, Theodor Direct factorizations of measures. 82c:28004
 Garay, J. (with Soler, M.) On the Darboux property of positive measures. (Spanish. English summary) 82g:28004
 Giannone, Alberto See Barone, E.; et al., 82f:28001
 Graf, Siegfried A Radon-Nikodým theorem for capacities. 82c:28005
 Gudder, Stanley P. (with Marchand, Jean-Paul) A coarse-grained measure theory. (Russian summary) 82i:28004
 Hagood, John W. See Bell, Wayne C., (See 82g:28002)
 Harazisvili, A. B. On the uniqueness property of a measure on its domain of definition. (Russian. Georgian and English summaries) 82b:28005
 Holbrook, John A. R. Stochastic independence and space-filling curves. 82i:28005
 Jersboe, Ole Groth On finitely-additive probability measures. (Danish. English summary) 82a:28002
 Khan, T. K. (with Pal, M.) Some results on sets of positive measure. (Serbo-Croatian summary) 82c:28002
 Kim, Joung Kook On the results of invariant sets under translation for probability measure. (Korean summary) 82g:28005

- Kulenović, Mustafa See Alajbegović, Jusuf; et al., 82a:28001
 Lembcke, Jörn On a measure extension theorem of Bierlein. 82c:28005
 Marchand, Jean-Paul See Gudder, Stanley P., 82i:28004
 Mattila, Pertti Absolute continuity and uniqueness of measures on metric spaces. 82c:28003
 Miller, Harry I. See Alajbegović, Jusuf; et al., 82a:28001
 Musiał, Kazimierz Projective limits of perfect measure spaces. 82i:28006
 Neubrunn, Tibor Dominated sets of measures. (Slovak and Russian summaries) 82g:28006
 Olejček, Vladimír Ultrafilters and Darboux property of finitely additive measure. (Russian summary) 82m:28006
 Pal, M. See Khan, T. K., 82c:28002
 Pfug, Georg The equivalence of the Bishop-deLeeuw and the Pigou-Dalton order structures of measures. (Italian summary) 82c:28004
 Plachky, Detlef Darboux property of measures and contents. 82a:28003
 Radić, Mirko See Alajbegović, Jusuf; et al., 82a:28001
 Rao, K. P. S. Bhaskara (with Rao, M. Bhaskara) Some characterisations of nonatomic measures. 82d:28005
 (with Rao, M. Bhaskara) On the separating number of a finite family of charges. 82m:28007
 Rao, M. Bhaskara See Rao, K. P. S. Bhaskara, 82d:28005 and 82m:28007
 Rapoport, É. O. The best approximation of probabilistic measures on a straight line by discrete ones. (Russian) 82d:28006
 Scozzafava, Romano See Barone, E.; et al., 82f:28001
 Soler, M. See Garay, J., 82g:28004
 Stratigos, Panagiotis D. A general measure decomposition theorem, by means of the general Wallman remainder. (See 82g:28002)
 Sultan, Alan Some recent measure extension procedures and applications. (See 82g:28002)
 Szczerba, Lesław W. ★O mierze Jordana. (Polish) [Jordan content] 82m:28008
 Tulpani, Sauro On continuous and invariant measures for a transformation. (Italian. English summary) 82i:28007
 Valadier, Michel Structure des atomes conditionnels d'un espace de probabilité. 82f:28002
 Vinš, František A note on a one-dimensional measure in a two-dimensional space. (Slovak. Russian and English summaries) 82b:28006

secondary classifications:

- Adamski, W. Weakly regular and τ -smooth zero-one measures. (82m:28025)
 Armstrong, Thomas E. (with Priky, Karel) Liapounoff's theorem for nonatomic, finitely-additive, bounded, finite-dimensional, vector-valued measures. (82f:28008)
 Burton, G. R. Skeletons and sections of convex bodies. (82g:52009)
 Coletti, Giuliana (with Regoli, Giuliana) On the distribution function of a finitely additive probability measure. (Italian. English summary) (82j:60029)
 Dal Maso, Gianni Convergence faible et capacités. (Italian summary) (82g:28007)
 Fontes de Sousa, Maria de Fátima On conditional probabilities and ϵ -finite measures. (Portuguese) (82c:60008)
 Grzegorek, Edward On saturated sets of Boolean rings and Ulam's problem on sets of measures. (82k:04006)
 Harazisvili, A. B. An application of the Banach theorem. (Russian. Georgian and English summaries) (82f:28015)
 Hinds, W. E. See Kotlarski, I. I., (82f:60042)
 Hutchinson, John E. Fractals and self-similarity. (82b:49026)
 Kleitman, Eugene M. A theory of random numbers. (82d:03084)
 Kotlarski, I. I. (with Hinds, W. E.) Characterizations using intersections of random events. (82f:60042)
 Kukuš, O. G. Weak convergence of measures and convergence of cumulants. (Russian. English summary) (82c:60021)
 Meyer, Burnett Inequalities for the generalized transfinite diameter. (82g:31011)
 Prather, Ronald E. Generating the k -subsets of an n -set. (82c:05005)
 Priky, Karel See Armstrong, Thomas E., (82f:28008)
 Rana, Inder K. Determination of probability measures through group actions. (82c:28025)
 Regoli, Giuliana See Coletti, Giuliana, (82j:60029)
 Sapounakis, A. Measures on totally ordered spaces. (82b:28018)
 Scozzafava, Romano Complete additivity, on suitable sequences of sets, of a simply additive and strongly nonatomic probability measure. (Italian. English summary) (82c:28004)
 Tsarpalias, A. A combinatorial theorem. (82j:04003)

28A15 Abstract differentiation theory, differentiation of set functions [See also 26A24.]

- Albano, Luigi (with Fedele, N.) On the existence of a primitive of a measurable function. (Italian) 82c:28006
 A general formulation of a theorem of Luzin. (Italian. English summary) 82c:28007
 Bell, Wayne C. Hellinger integrals and set function derivatives. 82b:28007
 Blass, Jean-Paul (with Valenza, Antoine) Sur la densité des mesures positives sur \mathbb{R} . 82c:28008a
 (with Valenza, Antoine) Dérivée approximative d'une mesure positive sur \mathbb{R} , théorème de décomposition. (English summary) 82c:28008b
 Fedele, N. See Albano, Luigi, 82c:28006
 Grande, Zbigniew (with Rzepka, Danuta) Sur le produit de deux dérivées vectorielles. 82c:28009
 Sur un théorème de Nikodým. [On a theorem of Nikodým] 82j:28003
 Guariglia, Emma Regular derivation. (Italian) 82m:28009
 Harazisvili, A. B. Nonmeasurable Hamel bases. (Russian) 82c:28010
 Lomani, Okito Sur un théorème de Vitali-de Possel. 82f:28003

Rzepka, Danuta See Grande, Zbigniew, 82c:28009
Valenza, Antoine See Blass, Jean-Paul, 82c:28008

secondary classifications:

Bagby, Richard J. Strengthened maximal functions and pointwise convergence in \mathbb{R}^n . (82j:44008)
Geman, D. (with Horowitz, Joseph) Smooth perturbations of a function with a smooth local time. (82j:60142)
Graf, Siegfried A Radon-Nikodým theorem for capacities. (82c:28005)
Horowitz, Joseph See Geman, D., (82j:60142)
Mattila, Pertti Absolute continuity and uniqueness of measures on metric spaces. (82c:28003)
Nakagami, Keiko Integration and differentiation of δ -function. I. (82i:46068)

28A20 Measurable and nonmeasurable functions, sequences of measurable functions, modes of convergence

Artstein, Zvi A note on Fatou's lemma in several dimensions. 82b:28008
Bartle, Robert G. An extension of Egorov's theorem. 82b:28005
Properties equivalent to almost uniform convergence. (See 82g:28002)
Dai Maso, Gianni Convergence faible et capacités. (Italian summary) 82g:28007
Feldman, Marcus B. A proof of Lusin's theorem. 82b:28006
Fremlin, D. H. Measurable functions and almost continuous functions. 82c:28006
Grande, Zbigniew Sur la mesurabilité des fonctions de plusieurs variables. (Russian summary) 82a:28004
Sur les fonctions de deux variables équi continues par rapport à une variable. 82c:28007
Henle, James M. Functions with arbitrarily small periods. 82d:28007
Himmelberg, C. J. (with Parthasarathy, T.; Van Vleck, F. S.) On measurable relations. 82c:28011
Johnson, Roy A. Measurability of cross section measure of a product Borel set. 82c:28005
Kisiljakov, S. V. Quantitative aspect of correction theorems. (Russian. English summary) 82c:28012
Kwieceńska, Grazyna On the measurability of real functions defined on product-spaces. (Russian summary) 82b:28007
Marcellan Español, Francisco (with Rubio de Francia, José L.) Functionals continuous with respect to convergence in measure. (Spanish) 82d:28008
Miller, Harry I. An analogue of a result of Carathéodory. 82g:28008
Neubrunn, Tibor On transfinite convergence in measure spaces. (Slovak and Russian summaries) 82c:28013
Parthasarathy, T. See Himmelberg, C. J.; et al., 82c:28011
Pták, Pavel Realcompactness and the notion of observable. 82g:28009
Rubio de Francia, José L. See Marcellan Español, Francisco, 82d:28008
Rudin, Walter Lebesgue's first theorem. 82c:28006
Rupniewska, Elżbieta Measurable multivalued transformations. (Polish. Russian and French summaries) 82c:28008
Salinetti, Gabriella (with Wets, Roger J.-B.) On the convergence of closed-valued measurable multifunctions. 82c:28007
Smith, William V. Convergence in measure of integrands. 82c:28008
TalaGrand, Michel Compacts de fonctions mesurables et filtres non mesurables. 82c:28009
Van Vleck, F. S. See Himmelberg, C. J.; et al., 82c:28011
Wagner, Elżbieta (with Wilczyński, W.) Convergence of sequences of measurable functions. 82c:28014
Sequences of measurable functions. 82m:28010
Wets, Roger J.-B. See Salinetti, Gabriella, 82c:28007
Wilczyński, W. See Wagner, Elżbieta, 82c:28014

secondary classifications:

Goffman, Casper (with Liu, Feng Chè; Waterman, Daniel) A remark on the spaces $V_{\mathcal{L},\alpha}^{\infty}$. (82i:26004)
de Korvin, A. (with Roberts, Charles E., Jr.) Convergence theorems for some scalar valued integrals when the measure is Nemytskii. (82f:47073)
Laczko, M. Functions with measurable differences. (82a:39002)
Liu, Feng Chè See Goffman, Casper; et al., (82i:26004)
Porickaja, L. H. Lebesgue-Banach points of functions in symmetric spaces. (Russian) (82d:46049)
Puglisi, Mario A. Measurability and Riesz-Lebesgue spaces of real functions. (Italian. English summary) (82b:46024)
Roberts, Charles E., Jr. See de Korvin, A., (82f:47073)
Waterman, Daniel See Goffman, Casper; et al., (82i:26004)

28A25 Integration with respect to measures and other set functions

Antonini, Rita Giuliano Sur la convergence faible des fonctions croissantes d'ensemble. (Italian summary) 82b:28010
Becker, Richard Edouard Mesures coniques et intégrale de Daniell. (English summary) 82c:28009
Dravecký, Jozef (with Šipoš, Ján) On the additivity of Gudder integral. (Russian summary) 82b:28009
Šipoš, Ján See Dravecký, Jozef, 82b:28009

secondary classifications:

Abrahamse, M. B. (with Fisher, S. D.) Mapping intervals to intervals. (82i:26008)
Chatfield, J. A. Product integration and eigenvalues. (82a:26007)
Fisher, S. D. See Abrahamse, M. B., (82i:26008)
Graf, Siegfried A Radon-Nikodým theorem for capacities. (82c:28005)

Li, Yü Chia Applications of the Fourier-Wiener transform to differential equations on infinite-dimensional spaces. I. (82k:35098)

Lipovan, Octavian Sur l'intégrabilité des fonctions multivoques. (82b:28010)
Ross, Kenneth A. Another approach to Riemann-Stieltjes integrals. (82b:26011)
Satyanarayana, Upadhyayula V. A note on Riemann-Stieltjes integrals. (82b:26012)

28A33 Spaces of measures, convergence of measures [See also 46E27, 60Bxx.]

Kolčinskii, V. I. Some theorems on uniform convergence of a sequence of measures. (Russian) 82b:28011

secondary classifications:

de Korvin, A. (with Roberts, Charles E., Jr.) Convergence theorems for some scalar valued integrals when the measure is Nemytskii. (82f:47073)
Koumoullis, G. Some topological properties of spaces of measures. (82k:46041)
Nougues-Sainte-Beuve, M.-F. Espaces de Lindelöf et quelques propriétés topologiques des espaces de mesures. (82m:28004)
Roberts, Charles E., Jr. See de Korvin, A., (82f:47073)

28A35 Measures and integrals in product spaces

Lesche, B. J. (with Martignon, Laura) Über die Extrempunkte der Menge der bistochastischen Masse über dem Messraum $[0, 1] \times [0, 1]$. 82f:28004
Martignon, Laura See Lesche, B. J., 82f:28004
Pachl, Jan K. Two classes of measures. 82b:28012

secondary classifications:

Friedman, Harvey A consistent Fubini-Tonelli theorem for nonmeasurable functions. (82b:03097)
Johnson, Roy A. Measurability of cross section measure of a product Borel set. (82c:28005)
Nearly Borel sets and product measures. (82b:28024)
Products of two Borel measures. (82m:28026)
Musiał, Kazimierz Projective limits of perfect measure spaces. (82i:28006)
Rice, Michael D. Uniform ideas in analysis. (82i:54070)
Swartz, Charles Weak Fubini theorems for the Dobrakov integral. (82b:28016)
TalaGrand, Michel Sur la mesure de la projection d'un compact et certaines familles de cercles. (English summary) (82b:28004)
Tuy, Heang Reconstruction of a three-dimensional object from a limited range of views. (82g:44007)

28A50 Integration and disintegration of measures

Calbrix, J. Mesures non σ -finies: désintégration et quelques autres propriétés. (English summary) 82c:28010
Fuchssteiner, Benno An abstract disintegration theorem. 82k:28008

secondary classifications:

Abdurashidov, H. The Radon-Nikodým theorem for distributions with values in $S[0, 1]$. (Russian) (82c:28017)
Eisele, Theodor Direct factorizations of measures. (82c:28004)
Ramachandran, D. A note on regular conditional probabilities in Doob's sense. (82k:60007)
Valadier, Michel Structure des atomes conditionnels d'un espace de probabilité. (82f:28002)

28A51 Lifting theory [See also 46G15.]

Babiker, A. G. A. G. (with Strauß, Werner) Measure spaces in which every lifting is an almost \mathcal{C} -lifting. (Arabic summary) 82c:28009
Johnson, Russell A. Strong liftings commuting with minimal distal flows. 82a:28005
Rodriguez-Salinas, Baltasar Radon measures of type (\mathcal{C}) and measures with "lifting". (Spanish. English summary) 82f:28005
Strauß, Werner See Babiker, A. G. A. G., 82c:28009
TalaGrand, Michel Non-existence de certaines sections mesurables et contre-exemples en théorie du relèvement. 82g:28010
Non existence de relèvement pour certaines mesures finiment additives et retracés de $\mathcal{B}\mathcal{N}$. 82i:28010

secondary classifications:

Bellow, Alexandra Lifting compact spaces. (82c:28027)

28A60 Measures on Boolean rings, measure algebras [See also 54H10.]

Benderskii, O. Ja. Convergence of sequences of semifield-valued measures. (Russian) 82m:28011
Brook, Cecilia H. Strictly positive measures and submeasures on Boolean algebras. (See 82g:28002)
Demidovič, E. P. (with Taraščanskii, M. T.) A remark on the extension of measures. (Russian) 82m:28012
Greco, Gabriele H. The continuous measures defined on a Boolean algebra. (Italian. French summary) 82c:28015
Ivan, Floarea Convex sum functions. (Romanian) 82a:28006
L'espace des séparateurs p -intégrables. 82b:28013
Kalinin, V. V. Invariant measures on Boolean algebras. (Russian) 82g:28011
Popov, V. A. Supermeasures and semimeasures on Boolean algebras. (Russian) 82a:28007

- Poroškin, A. G. Functions on lattices. (Russian) **82a:28006**
 Riečan, Beloslav The measure extension theorem for subadditive probability measures in orthomodular σ -continuous lattices. **82m:28013**
 On abstract characterization of Hausdorff measure. (Slovak and Russian summaries) **82m:28014**
 Tarasčanskii, M. T. See Demidovič, E. P., **82m:28012**
 Volau, Peter The measure extension problem on ortholattices. (Slovak and Russian summaries) **82g:28012**
 Vrabel, Peter The measure extension theorem for subadditive measures in σ -continuous logics. (Russian summary) **82i:28011**

secondary classifications:

- Armstrong, Thomas E. (with Priky, Karel) Liapounoff's theorem for nonatomic, finitely-additive, bounded, finite-dimensional, vector-valued measures. (**82f:28008**)
 Gudder, Stanley P. (with Marchand, Jean-Paul) A coarse-grained measure theory. (Russian summary) (**82i:28004**)
 Kalinin, V. V. Invariant measures on Boolean algebras and dimension functions on logics. (Russian) (**82f:06022**)
 Marchand, Jean-Paul See Gudder, Stanley P., (**82i:28004**)
 Mycielski, Jan Finitely additive invariant measures. I. (**82g:43003a**)
 Priky, Karel See Armstrong, Thomas E., (**82f:28008**)
 Rosenblatt, J. M. Finitely additive invariant measures. II. (**82g:43003b**)

28A75 Length, area, volume, other geometric measure theory [See also 26B15, 49F20.]

- Bardaro, Carlo Kernels, the symmetric derivative and the perimeter of a measure. (Italian) **82e:28011**
 Bindschadler, David (with Nishiura, Togo) The Goffman-Liu area and Plateau's problem. **82g:28013**
 Fickett, James (with Mycielski, Jan) A problem of invariance for Lebesgue measure. **82a:28009**
 Goffman, Casper (with Nishiura, Togo) De Giorgi perimeter, Lebesgue area, Hausdorff measure. **82d:28015**
 Hatano, Kaoru A remark on fractional dimensions of difference sets. **82h:28008**
 Juza, Miloslav Mesures spéciales dans l'espace E_2 . **82i:28012**
 Marion, Jacques Sur la mesure de Hausdorff des ensembles parfaits de translation et de certains ensembles analogues. (English summary) **82h:28014**
 Mycielski, Jan See Fickett, James, **82a:28009**
 Nishiura, Togo See Bindschadler, David, **82g:28013** and Goffman, Casper, **82m:28015**
 Woodall, D. R. Dividing a cake fairly. **82f:28006**

secondary classifications:

- Beck, Anatole A pathological flow in the torus. (**82e:54046**)
 Brandi, Primo (with Salvadori, Anna) A representation theorem for the parametric integral of Weierstrass in the calculus of variations. (Italian. English summary) (**82e:49061**)
 Carey, Richard W. (with Pincus, Joel D.) Mean motion, principal functions, and the zeros of Dirichlet series. (**82k:47040**)
 Denkowski, Zofia La continuité de la section d'un ensemble semi-analytique et compact. (**82c:32007**)
 Foias, Ciprian A survey on the functional dynamical system generated by the Navier-Stokes equations. (**82c:35065**)
 Goodchild, Michael F. Fractals and the accuracy of geographical measures. (**82e:86009**)
 Kormum, Peer ★Construction of Borel measures on metric spaces. (**82h:28017**)
 Margulis, G. A. Some remarks on invariant means. (**82h:28034**)
 Marion, Jacques Dimension de Hausdorff et fractions continues. (English summary) (**82h:10073**)
 Mattila, Pertti Integral geometric properties of capacities. (**82h:31008**)
 Mendes-France, Michel (with Tenenbaum, Gérard) Dimension des courbes planes, papiers pliés et suites de Rudin-Shapiro. (English summary) (**82k:10073**)
 Mycielski, Jan Finitely additive invariant measures. I. (**82g:43003a**)
 Pincus, Joel D. See Carey, Richard W., (**82k:47040**)
 Pollington, Andrew Douglas The Hausdorff dimension of certain sets related to sequences which are not dense mod 1. (**82a:10065**)
 Rosenblatt, J. M. Finitely additive invariant measures. II. (**82g:43003b**)
 Salvadori, Anna See Brandi, Primo, (**82e:49061**)
 Sperner, Emanuel, Jr. Symmetrization and currents. (**82e:52010**)
 Sullivan, Dennis For $n > 3$ there is only one finitely additive rotationally invariant measure on the n -sphere defined on all Lebesgue measurable subsets. (**82h:28035**)
 Tenenbaum, Gérard See Mendes-France, Michel, (**82h:10073**)
 Trocenko, D. A. Properties of regions with a nonsmooth boundary. (Russian) (**82h:30015**)
 Väisälä, Jussi Quasisymmetric embeddings in Euclidean spaces. (**82i:30031**)

28A99 None of the above, but in this section

- Adams, Gregory See Ralescu, Dan A., **82j:28005**
 Higgs, Denis Axiomatic infinite sums—an algebraic approach to integration theory. **82f:28007**
 Klement, Erich Peter Characterization of fuzzy measures by classical measures. **82j:28004**
 Characterization of finite fuzzy measures using Markoff-kernels. **82e:28012**
 Ralescu, Dan A. (with Adams, Gregory) The fuzzy integral. **82j:28005**

secondary classifications:

- Biswas, A. Extensions of two theorems of S. Kurepa. (Serbo-Croatian summary) (**82f:26015**)
 Bollobás, Béla Measure graphs. (**82g:05077**)

- Carbone, Luciano (with Colombini, Ferruccio) On convergence of functionals with unilateral constraints. (**82j:49011**)
 Colombini, Ferruccio See Carbone, Luciano, (**82j:49011**)
 Klement, Erich Peter Fuzzy σ -algebras and fuzzy measurable functions. (**82e:03053**)
 (Kurepa, S.) See Biswas, A., (**82f:26015**)
 Lesche, B. J. (with Martignon, Laura) Über die Extrempunkte der Menge der bistochastischen Masse über dem Messraum $[0, 1] \times [0, 1]$. (**82f:28004**)
 Martignon, Laura See Lesche, B. J., (**82f:28004**)
 Wagon, Stanley Invariance properties of finitely additive measures in \mathbb{R}^n . (**82c:28026**)

28Bxx Measures and integrals with values in abstract spaces

28B05 Vector-valued measures and integrals [See also 46G10.]

- Abdurashidov, H. The Radon-Nikodým theorem for distributions with values in $S[0, 1]$. (Russian) **82c:28017**
 Armstrong, Thomas E. (with Priky, Karel) Liapounoff's theorem for nonatomic, finitely-additive, bounded, finite-dimensional, vector-valued measures. **82f:28008**
 Bilyeu, Russell G. (with Lewis, Paul W.) Vector measures and weakly compact operators on continuous function spaces: a survey. (See **82g:28002**)
 Brandi, Primo (with Salvadori, Anna) Martingales and Burkil-Cesari integrals. (Italian. English summary) **82m:28016**
 Brook, Cecilia H. (with Graves, William H.) Closed measures. **82g:28014**
 Butković, Davor On integration with respect to measures with values in arbitrary topological vector spaces. **82m:28017**
 On integration with respect to measures with values in arbitrary topological vector spaces. (Serbo-Croatian summary) **82h:28009**
 Candeloro, Domenico (with Sacchetti, Anna Martellotti) On the range of a vector measure. (Italian) **82f:28009**
 Dinuleanu, Nicolae Uniform σ -additivity and uniform convergence of conditional expectations in the space of Bochner or Pettis integrable functions. **82g:28015**
 Geitz, Robert F. Pettis integration. **82c:28018**
 Graves, William H. See Brook, Cecilia H., **82g:28014**
 Hudisberdier, V. N. The Lebesgue-Bochner integral and the Féjer-Lebesgue theorem in convergence vector spaces. (Russian) **82m:28018**
 Klavinec, Igor Applications of vector measures. **82m:28019**
 Lewis, Paul W. See Bilyeu, Russell G., (See **82g:28002**)
 Morales, Pedro Mean value theorem for the Dobrakov integral. (See **82g:28002**)
 Pettis, B. J. On the Radon-Nikodým theorem. **82f:28010**
 Priky, Karel See Armstrong, Thomas E., **82f:28008**
 Sacchetti, Anna Martellotti See Candeloro, Domenico, **82f:28009**
 Salvadori, Anna See Brandi, Primo, **82m:28016**
 Šipos, Ján Integration in partially ordered linear spaces. (Russian summary) **82g:28016**
 Swartz, Charles Integrability for the Dobrakov integral. **82h:28015**
 Weak Fubini theorems for the Dobrakov integral. **82h:28016**
 Taguchi, Yoshiko The Bochner integral for functions with values in the union of ranked vector spaces. **82c:28019**
 Uhl, J. J., Jr. Pettis's measurability theorem. **82m:28020**

secondary classifications:

- Aló, Richard A. (with de Korvin, André) Nonlinear integration on measures. (**82g:47045**)
 Bichteler, Klaus The stochastic integral as a vector measure. (**82d:60104**)
 Bilyeu, Russell G. (with Lewis, Paul W.) Uniform differentiability, uniform absolute continuity and the Vitali-Hahn-Saks theorem. (**82g:46083**)
 Choy, Stephen T. L. Riesz representation theorem and weak compactness. (**82h:47034**)
 Edgar, Gerald A. Asplund operators and a.e. convergence. (**82f:47053**)
 de Korvin, André See Aló, Richard A., (**82g:47045**)
 Lewis, Paul W. See Bilyeu, Russell G., (**82g:46083**)
 Linde, Werner Mappings of vector measures and the coincidence of 1-Radonifying and absolutely summing operators. (**82d:47028**)
 Makagon, Andrzej (with Schmidt, Franz) A decomposition theorem for densities of positive operator-valued measure. (Russian summary) (**82m:46047**)
 Millet, Annie (with Sucheston, Louis) On covering conditions and convergence. (**82f:60111**)
 Nougues-Sainte-Beuve, M.-F. Espaces de Lindelöf et quelques propriétés topologiques des espaces de mesures. (**82m:28004**)
 Oberle, Richard A. Extensions of measures with values in a topological group with applications to vector measures. (**82h:28010**)
 Raman, P. K. Vector measures and the ring of continuous functions. (**82k:46056**)
 Rodríguez-Salinas, Baltasar Integration of functions with values in a locally convex space. (Spanish. English summary) (**82i:46061**)
 The Radon-Nikodým theorem for measures with values in a locally convex space. (Spanish. English summary) (**82i:46062**)
 Schmidt, Franz See Makagon, Andrzej, (**82m:46047**)
 Schwartz, Laurent Les semi-martingales et la théorie de la mesure. (**82d:60093**)
 Sentilles, Dennis Stonian differentiation and representation of vector functions and measures. (**82k:46067**)
 Stonian integration of vector functions. (See **82g:28002**)
 Serban-Tofan, Doina The representation of certain (τ) -bounded operators. (Romanian. French summary) (**82h:28021**)
 Story, Donald P. A characterization of the local Radon-Nikodým property by tensor products. (**82i:46064**)
 Sucheston, Louis See Millet, Annie, (**82f:60111**)
 Talagrand, Michel Sur les mesures vectorielles définies par une application Pettis-intégrable. (English summary) (**82f:46051**)
 Volintiru, Constantin On the Radon-Nikodým property in Banach spaces. (**82k:46031**)
 Yor, Marc Quelques interactions entre mesures vectorielles et intégrales stochastiques. (**82h:60061**)

28B10 Group- or semigroup-valued measures and integrals

- Constantinescu, Cornelia On Nikodým's boundedness theorem. **82i:28011**
 Fleischer, Isidore (with Traynor, Tim) Equivalence of group-valued measures on an abstract lattice. (Russian summary) **82m:28021**
 Impens, C. An extension theorem for measures with values in a nonunitary n -semigroup. **82a:28010**
 Khurana, Surjit Singh Extension of positive, group-valued Baire measures. **82g:28017**
 Lipect, Zbigniew A generalization of an extension theorem of Bierlein to group-valued measures. (Russian summary) **82m:28022**
 McGill, Paul An elementary integral. **82h:28017**
 Morales, Pedro Regularity and extension of semigroup-valued Baire measures. **82g:28018**
 Oberle, Richard A. Extensions of measures with values in a topological group with applications to vector measures. **82h:28010**
 Orlicz, Władysław (with Urbanowski, Ryszard) A generalization of the Brooks-Jewett theorem. (Russian summary) **82i:28013**
 Pap, Endre On the ZED-integral. (Serbo-Croatian summary) **82i:28012**
 Traynor, Tim See Fleischer, Isidore, **82m:28021**
 Urbanowski, Ryszard See Orlicz, Władysław, **82i:28013**
 Weber, Hans Ein Fortsetzungssatz für gruppenwertige Maße. **82f:28013**

secondary classifications:

- Capek, Peter Decomposition theorems in measure theory. (Russian summary) **82m:28003**
 Kalton, N. J. The Orlicz-Pettis theorem. **82g:46027**
 Rama Bala, D. V. (with Sastry, K. P. R.) Additive set functions with values in a complete lattice ordered group. **82a:06030**
 Sastry, K. P. R. See Rama Bala, D. V., **82a:06030**

28B15 Measures and integrals with values in general ordered systems

- Bachman, George Characterization of various lattice regular measures in terms of the general Wallman remainder. (See **82g:28002**)
 Pap, Endre Integration of functions with values in complete semivector space. **82a:28011**
 Savel'ev, I. Ja. Extension of outer measures. (Russian) **82j:28006**
 Voland, Peter On extension of maps with values in ordered spaces. (Russian summary) **82a:28016**
 Vuza, Dan An abstract theory of measurability in the sense of Jordan. (Romanian. French summary) **82h:28018**

secondary classifications:

- Vonkumerová, Marta On the extension of positive operators. (Russian summary) **82h:06028**

28B20 Set-valued measures; integration of set-valued functions; measurable selections [See also 54C60, 54C65.]

- Aló, Richard A. (with de Korvin, André; Kunes, Laurence) Maps whose values are closed convex subsets of a Banach space. **82f:28014**
 Binzer, Hans-Wiegand (with Mammitsch, Volker) Bemerkung zu einem Satz von W. Rupp. (English summary) **82m:28023**
 Burgess, John P. Selections mesurables pour relations d'équivalence analytiques à classes G_δ . (English summary) **82c:28020**
 Clarke, Frank H. A variational proof of Aumann's theorem. **82c:28011**
 Costé, Alain Set-valued measures. **82h:28019**
 Graf, Siegfried A measurable selection theorem for compact-valued maps. **82k:28012**
 Measurable weak selections. **82h:28020**
 de Korvin, André See Aló, Richard A.; et al., **82f:28014**
 Kozek, Andrzej (with Suchanecki, Zdzisław) Multifunctions of faces for conditional expectations of selectors and Jensen's inequality. **82c:28021**
 Kunes, Laurence See Aló, Richard A.; et al., **82f:28014**
 Lipovan, Octavian Sur l'intégrabilité des fonctions multivoques. **82h:28010**
 Maitra, Ashok (with Rao, B. V.) Generalizations of Castaing's theorem on selectors. **82m:28024**
 Mammitsch, Volker See Binzer, Hans-Wiegand, **82m:28023**
 Ohba, Sachio The range of a multimeasure. (Japanese summary) **82i:28014**
 Phan Văn Chu'ong Sur l'existence de sections séparément mesurables et séparément absolument continues d'une application multivoque. Applications aux équations intégrales multivoques. **82c:28013**
 Rao, B. V. See Maitra, Ashok, **82m:28024**
 Suchanecki, Zdzisław See Kozek, Andrzej, **82c:28021**

secondary classifications:

- Klei, Heinz-Albrecht Représentation intégrale de fonctions disjointement additives. (English summary) **82g:46084**
 Kozek, Andrzej (with Suchanecki, Zdzisław) Conditional expectations of selectors and Jensen's inequality. **82m:60005**
 Srivastava, Shashi Mohan A representation theorem for closed valued multifunctions. (Russian summary) **82a:54027**
 Suchanecki, Zdzisław See Kozek, Andrzej, **82m:60005**
 Talagrand, Michel Non-existence de certaines sections mesurables et contre-exemples en théorie du relèvement. **82g:28010**

28B99 None of the above, but in this section

secondary classifications:

- Benderskii, O. Ja. Convergence of sequences of semifield-valued measures. (Russian) **82m:28011**

- Henstock, Ralph Division spaces, vector-valued functions and backwards martingales. **82i:60091**
 Nielsen, Ole A. ★Direct integral theory. **82c:46081**

28Cxx Measures on spaces with additional structure [See also 46G12, 58C35, 58D20.]

28C05 Integration theory via linear functionals (Radon measures, Daniell integrals, etc.), representing measures

- Becker, Richard Edouard Sur l'intégrale de Daniell. **82h:28011**
 Butković, Davor On vector-valued Radon measures. **82h:28012**
 Desibes, Ali Applications de radonification des mesures compactologiques d'un espace métrique. **82d:28009**
 Jiménez Guerra, Pedro On the convergence of means. (Spanish. English summary) **82h:28013**
 A criterion of correspondence between cylindrical measures and Radon measures of type (3C). (Spanish. English summary) **82c:28014**
 Nguyễn Văn Thu Stable random measures. **82h:28021**
 Puglisi, Mario A. Measurability and Daniell integrals on an abstract Riesz space. (Italian. English summary) **82h:28022**

secondary classifications:

- Becker, Richard Edouard Représentation des mesures coniques. (English summary) **82c:46055**
 Gardner, R. J. (with Pfeffer, W. F.) Are diffused, regular, Radon measures σ -finite? **82i:28016**
 Khan, Liaqat Ali The strict dual of $C(X, E_n)$. **82g:46056**
 Letta, G. Quasimartingales et formes linéaires associées. **82i:60092**
 Nguyễn Duy Tiến (with Weron, Aleksander) Banach spaces related to α -stable measures. **82h:60011**
 Okazaki, Yoshiaki Bochner problem on a topological vector space with a quasi-invariant measure. **82i:46059**
 Pfeffer, W. F. See Gardner, R. J., **82i:28016**
 Swartz, Charles Integrability for the Dobrakov integral. **82h:28015**
 Weak Fubini theorems for the Dobrakov integral. **82h:28016**
 Tjur, Tue ★Probability based on Radon measures. **82h:60032**
 Valdivia, Manuel Spaces of Radon measures. (Spanish. English summary) **82c:46040**
 Weron, Aleksander See Nguen Zui Tien, **82h:60011**

28C10 Measures on topological groups, Haar measures, invariant measures [See also 43A05.]

- Armstrong, Thomas E. Borel measures on compact groups are meager. (See **82g:28002**)
 Borel measures on compact groups are meager. **82k:28013**
 Dence, Thomas P. A Lebesgue decomposition for elements in a topological group. **82c:28015**
 Hahn, Peter Haar measure for measure groupoids. **82a:28012**
 Harazivili, A. B. Invariant measures in vector spaces. (Russian. Georgian and English summaries) **82c:28022**
 An application of the Banach theorem. (Russian. Georgian and English summaries) **82f:28015**
 Hulanicki, Andrzej (with Ryll-Nardzewski, Czesław) Invariant extensions of the Haar measure. **82c:28023**
 Jabłoński, Marian (with Lasota, Andrzej) Absolutely continuous invariant measures for transformations on the real line. **82h:28014**
 Kasprowski, Piotr On invariant measures for piecewise convex transformation on the half line. **82h:28015**
 Lasota, Andrzej See Jabłoński, Marian, **82h:28014**
 Masani, P. An outline of the theory of stationary measures over \mathbb{R}^n . **82c:28024**
 Mirotn, A. R. An invariant Borel measure extends from a semigroup to the group of its quotients. (Russian. English summary) **82k:28014**
 Mycielski, Jan Problems on finitely additive invariant measures. **82g:28019**
 Nakano, Hidegoro Double integral theorem of Haar measures. **82k:28015**
 Rana, Inder K. Determination of probability measures through group actions. **82c:28025**
 Ryll-Nardzewski, Czesław See Hulanicki, Andrzej, **82c:28023**
 Sander, Wolfgang A decomposition theorem. **82h:28016**
 Sleijpen, Gérard L. G. A note on measures vanishing on emaciated sets. **82c:28016**
 Wagon, Stanley Invariance properties of finitely additive measures in \mathbb{R}^n . **82c:28026**

secondary classifications:

- Engle, Jessie Ann Haar measure on a left-continuous group. **82c:22004**
 Groemer, H. The average measure of the intersection of two sets. **82c:49034**
 Hirsch, Francis Principe complet du maximum et principe complet du maximum relatif. **82c:31016**
 Johnson, David L. Translation-invariant linear forms on $D(G)$. **82f:22002**
 Lasota, Andrzej A fixed point theorem and its application in ergodic theory. **82c:47071**
 Sander, Wolfgang Ein Beitrag zur Baire-Kategorie-Theorie. (English summary) **82c:22004**
 Seda, Anthony Karel On measures in fibre spaces. **82m:43002**
 Siebert, Eberhard Diffuse and discrete measures semigroups of probability measures on topological groups. (French summary) **82m:60015**
 Sine, Robert C. On invariant probabilities for random rotations. **82c:28020**
 Vallander, S. S. One system of automata with local interactions. **82m:68100**
 Zhang, Yin Nan On a necessary and sufficient condition for the existence of quasi-invariant measures. (Chinese. English summary) **82g:60015**

28C15 Measures on topological spaces (regularity of measures, etc.)

- Adamski, W. Weakly regular and τ -smooth zero-one measures. **82m:28025**
- Antonec, M. A. (with Cvetkov, A. A.) Projective limits of Borel measures and A. G. Sigalov's theorem on the representation of an algebra of random variables. (Russian) **82d:28010**
- Babiker, A. G. A. G. (with Sapounakis, A.) Some regularity conditions on topological measure spaces. **82i:28015**
- Bachman, George (with Sultan, Alan) On regular extensions of measures. **82f:28016**
- Bellow, Alexandra Lifting compact spaces. **82c:28027**
- Chaurasia, A. R. Weak convergence of measures on separable Banach spaces. **82f:28017**
- Čuprunov, A. N. Nonmeasurable subspaces. (Russian) **82a:28013**
- Cvetkov, A. A. See Antonec, M. A., **82d:28010**
- Deliyannis, Platon (with Wenger, John) Representing Baire and Borel measures by functionals. (See **82g:28002**)
- Gardner, R. J. (with Pfeffer, W. F.) Are diffused, regular, Radon measures σ -finite? **82i:28016**
- Goldman, André (with Talagrand, Michel) Propriétés de Radon-Nikodým pour les cônes positifs de mesures. **82k:28016**
- Janssen, Arnold Über die Meßbarkeit der Mengen der zulässigen und singulären Translationen von Maßen: der Lebesguesche Zerlegungssatz für Kerne. (English summary) **82b:28023**
- Integration separat stetiger Funktionen. (English summary) **82g:28020**
- Johnson, Roy A. Extending the product of two regular Borel measures. **82d:28011**
- Nearly Borel sets and product measures. **82b:28024**
- Products of two Borel measures. **82m:28026**
- Kornum, Peer ★ Construction of Borel measures on metric spaces. **82h:28017**
- Koumoullis, G. On perfect measures. **82i:28017**
- Namioka, I. Intersection numbers and spaces of measures. **82m:28027**
- Pfeffer, W. F. Some remarks on generalized Borel measures in topological spaces. **82b:28025**
- See also Gardner, R. J., **82i:28016**
- Rao, B. V. (with Yamada, Sakutarō) Note on a problem of Diepenbrock. **82b:28026**
- Sapounakis, A. Measures on totally ordered spaces. **82b:28018**
- See also Babiker, A. G. A., **82i:28015**
- Sultan, Alan See Bachman, George, **82f:28016**
- Szeto, Mabel On maximal measures with respect to a lattice. (See **82g:28002**)
- Talagrand, Michel See Goldman, André, **82k:28016**
- Vera Boti, G. Decomposition of finitely additive measures in topological spaces. (Spanish. English summary) **82j:28007**
- Wenger, John See Deliyannis, Platon, (See **82g:28002**)
- Wheeler, Robert F. Extensions of a σ -additive measure to the projective cover. **82c:28028**
- Yamada, Sakutarō See Rao, B. V., **82b:28026**
- Yamasaki, Yasuo Quasi-invariance of measures on an infinite-dimensional vector space and the continuity of the characteristic functions. **82d:28018**

secondary classifications:

- Björnsson, Ottó J. A note on the characterization of standard Borel spaces. (82a:54070)
- Byczkowski, T. (with Zak, T.) Asymptotic properties of semigroups of measures on vector spaces. (82d:60013)
- Collins, Heron S. Strict topologies in measure theory. (82j:46030)
- Flachsmeier, Jürgen (with Terpe, Frank) Summations as linear maps and as curves. (82i:40011)
- Fremlin, D. H. Measurable functions and almost continuous functions. (82c:28006)
- Graf, Siegfried Measurable weak selections. (82b:28020)
- Hồ Đăng Phúc Universal distribution for infinitely divisible distributions on Fréchet space. (82c:60018)
- Morales, Pedro Regularity and extension of semigroup-valued Baire measures. (82g:28018)
- Nguyễn Văn Thu A new version of Doebelin's theorem. (82k:60017)
- Rodríguez-Salinas, Baltasar μ -spaces of Suslin and Lusin. The strong "lifting" property. (Spanish) (82c:46060)
- Romanov, V. A. Limits of differentiable measures in Hilbert space. (Russian) (82e:46061)
- Terpe, Frank See Flachsmeier, Jürgen, (82i:40011)
- Vera Boti, G. Finitely additive measures on topological spaces. (Spanish) (82e:46062)
- Zak, T. See Byczkowski, T., (82d:60013)

28C20 Measures and integrals in function spaces (Wiener measure, Gauss measure, etc.) [See also 58D20, 60B11.]

- Čobanjan, S. A. See Linde, Werner; et al., **82b:28027**
- Goldin, Gerald A. (with Menikoff, Ralph; Sharp, David H.) Induced representations of diffeomorphism groups described by cylindrical measures. (See **82g:28002**)
- Kondrat'ev, Ju. G. (with Samoilenko, Ju. S.) Generalized derivatives of probability measures on \mathbb{R}^n . (Russian) **82m:28028**
- Lee, Tack Wang On Wiener integrals and generalized Riemann integrals. **82b:28019a**
- On a translation theorem for the generalized Riemann integral. **82b:28019b**
- Linde, Werner (with Tarieladze, V. I.; Čobanjan, S. A.) Characterization of certain classes of Banach spaces by properties of Gaussian measures. (Russian. English summary) **82b:28027**
- Maeda, Michie Rotation-invariant cylindrical measures. **82c:28017**
- Menikoff, Ralph See Goldin, Gerald A.; et al., (See **82g:28002**)
- Okazaki, Yoshiaki Bochner's theorem on measurable linear functionals of a Gaussian measure. **82m:28029**
- Rao, Jammalamadaka Sreenivasa (with Robertson, James B.) A characterization of Gaussian spaces. **82b:28028**
- Robertson, James B. See Rao, Jammalamadaka Sreenivasa, **82b:28028**
- Samoilenko, Ju. S. See Kondrat'ev, Ju. G., **82m:28028**
- Sharp, David H. See Goldin, Gerald A.; et al., (See **82g:28002**)

- Tarieladze, V. I. See Linde, Werner; et al., **82b:28027**
- Vladimirskii, Ju. N. Cylindrical measures and p -summing operators. (Russian. English summary) **82f:28018**
- Watson, N. A. Initial singularities of Gauss-Weierstrass integrals and their relations to Laplace transforms and Hausdorff measures. **82b:28029**
- Yamasaki, Yasuo Translationally invariant measure on the infinite-dimensional vector space. **82c:28029**
- Zhao, Zhong Xin A note on the theory of abstract Wiener space. (Chinese) **82f:28019**

secondary classifications:

- Albeverio, Sergio (with Blanchard, Ph.; Hoegh-Krohn, Raphael) Stationary phase for the Feynman integral and trace formula. (See **82b:81005**)
- Basirov, A. E. A stochastic differential equation in Hilbert space. (Russian. Azerbaijani and English summaries) (82d:60107)
- Blanchard, Ph. See Albeverio, Sergio; et al., (See **82b:81005**)
- Christensen, Jens Peter Reus (with Pachl, Jan K.) Measurable functionals on function spaces. (French summary) (82j:46035)
- Đặng Hùng Thắng (with Nguyễn Duy Tiển) On symmetric stable measures with discrete spectral measure on Banach spaces. (82f:60018)
- (with Nguyễn Duy Tiển) On the extension of stable cylindrical measures. (82k:60010)
- Dvurečenskij, Anatolij (with Pulmannová, Sylvia) Random measures on a logic. (82k:81005)
- Egorov, A. D. Approximate formulas for integrals on the Gaussian measure with the correlation operator $(A+B)^{-1}$. (Russian. English summary) (82i:60010)
- Figotin, A. L. Asymptotic behavior for large times of certain Wiener integrals. I. (Russian) (82d:60152a)
- Asymptotic behavior for large times of certain Wiener integrals. II. (Russian) (82d:60152b)
- Foias, Ciprian (with Temam, Roger) Homogeneous statistical solutions of Navier-Stokes equations. (82g:35097)
- Fremlin, D. H. (with Talagrand, Michel) A Gaussian measure on l^∞ . (82i:60011)
- Hirschfeld, Allen C. Canonical and covariant path integrals. (82b:81033)
- Hồ Đăng Phúc (with Nguyễn Văn Thu) Universal random distributions. (Vietnamese. English summary) (82k:60009)
- Hoegh-Krohn, Raphael See Albeverio, Sergio; et al., (See **82b:81005**)
- Hwang, Chii Ruey A generalization of Laplace's method. (82b:60007)
- Janović, L. A. See Rancevič, V. A., (82e:41047)
- Kanevskii, V. A. (with Lev, G. S.) Point sequences distributed in an infinite-dimensional space. (Russian) (82d:60062)
- Khurana, Surjit Singh Weakly compactly generated Fréchet spaces. (82j:46013)
- Koval'čik, Ī. M. Linear operator equations and a continual integral with respect to a Gaussian measure. (Russian. English summary) (82f:47018)
- Kwapień, Stanisław (with Szymański, Bogusław) Some remarks on Gaussian measures in Banach spaces. (82b:60010)
- Lev, G. S. See Kanevskii, V. A., (82d:60062)
- Lipovan, Octavian On probability measures in subspaces of the Banach space of bounded real measures. (Romanian. French summary) (82g:60006)
- The topological supports of Gaussian probability measures in subspaces of spaces of real bounded measures. (Romanian. French summary) (82g:60007)
- Gaussian probability measures, in subspaces of the Banach space of bounded real measures. (Romanian. French summary) (82g:60008)
- Muštari, D. H. Spaces in which criteria of the Bochner and Lévy type are satisfied. (Russian) (82c:60011)
- Nguyễn Duy Tiển See Đặng Hùng Thắng, (82f:60018) and (82k:60010)
- Nguyễn Văn Thu A characterization of some probability distributions. (82f:60021)
- See also Hồ Đăng Phúc, (82k:60009)
- Ostrovskii, E. I. A characterization of probability measures in Banach space by two-dimensional cylindrical distributions. (Russian. English summary) (82k:60011)
- Pachl, Jan K. See Christensen, Jens Peter Reus, (82j:46035)
- Plikus, A. Some properties of multiple Itô integrals. (Russian. Lithuanian and English summaries) (82j:60099)
- Pulmannová, Sylvia See Dvurečenskij, Anatolij, (82k:81005)
- Ratkauskas, A. A family of stable measures in some Banach spaces. (Russian. Lithuanian and English summaries) (82b:60012)
- Rancevič, V. A. (with Janović, L. A.) A note on the asymptotic expansion of a type of continual integral. (Russian. English summary) (82e:41047)
- Satō, Hiroshi Gaussian measurable dual and Bochner's theorem. (82k:60012)
- Schulman, Lawrence S. ★ Techniques and applications of path integration. (82b:81003)
- Słowkowski, W. Concerning pre-supports of linear probability measures. (82a:60015)
- Sobolevskii, P. I. Recurrent formulas for an approximate calculation of Poisson continual integrals. (Russian. English summary) (82f:60168)
- Szymański, Bogusław See Kwapień, Stanisław, (82b:60010)
- Talagrand, Michel See Fremlin, D. H., (82i:60011)
- Tarieladze, V. I. See Vahanjia, N. N.; et al., (82g:60010)
- Temam, Roger See Foias, Ciprian, (82g:35097)
- Tortrat, Albert See Vahanjia, N. N.; et al., (82g:60010)
- Vahanjia, N. N. (with Tarieladze, V. I.; Tortrat, Albert) Continuity of random linear functions. (Russian. English summary) (82g:60010)
- Veech, William A. A Gauss measure on the set of interval exchange transformations. (82c:28041)
- Yamasaki, Yasuo Quasi-invariance of measures on an infinite-dimensional vector space and the continuity of the characteristic functions. (82d:28018)
- Yasue, Kunio A path-probability representation for wavefunctions. (82i:81044)
- Zhao, Zhong Xin Quasilinear transformation in abstract Wiener spaces. (82g:60011)

28C99 None of the above, but in this section

- Černikov, P. V. Continuation of measurable mappings. (Russian) **82g:28021**

- Lugovaja, G. D. (with Šerstnev, A. N.) The Gleason theorem for unbounded measures. (Russian) **82h:28030**
 Riečan, Bečladav On the unified measure and integration theory. (Slovak and Russian summaries) **82d:28012**
 Šerstnev, A. N. See Lugovaja, G. D., **82h:28020**

secondary classifications:

- Cawley, Robert Gauge invariance and the Helmholtz conditions. **(82h:70019)**
 Kinz, Franz Convolutions of probability measures on semigroups. **(82c:22007)**
 Krakowiak, W. Operator-stable probability measures on Banach spaces. **(82c:60010)**
 Viana, Victor Some topics in formal languages theory viewed from the standpoint of measure theory. **(82h:68076)**

28Dxx Measure-theoretic ergodic theory [See also 22D40, 47A35, 54H20, 58Fxx, 60Fxx, 60G10.]

secondary classifications:

- Foguel, Shaul R. ★Selected topics in the study of Markov operators. **(82h:60127)**
 (Katok, Anatole) See Ergodic theory and dynamical systems, **(82i:28001)**
 Chaotic phenomena in deterministic systems and dynamical system theory ★Chaotic phenomena in deterministic systems and dynamical system theory. (Japanese) **(82h:58015)**
 College Park, Md. ★Ergodic theory and dynamical systems. I. **(82i:28001)**
 Ergodic theory ★Théorie ergodique. (French) [Ergodic theory] **(82h:28001)**
 Ergodic theory and dynamical systems ★Ergodic theory and dynamical systems. I. **(82i:28001)**
 Les Plans-sur-Bex ★Théorie ergodique. (French) [Ergodic theory] **(82h:28001)**
 Seminar:
 Ergodic Theory ★Théorie ergodique. (French) [Ergodic theory] **(82h:28001)**
 Symposium:
 Chaotic Phenomena in Deterministic Systems and Dynamical System Theory
 ★Chaotic phenomena in deterministic systems and dynamical system theory. (Japanese) **(82h:58015)**

28D05 Measure-preserving transformations

- Aaronson, Jon The asymptotic distributional behaviour of transformations preserving infinite measures. **82m:28030**
 Becker, M. E. Multiparameter groups of measure-preserving transformations: a simple proof of Wiener's ergodic theorem. **82m:28031**
 Bouleau, Nicolas Une remarque sur le schéma de Bernoulli et quelques extensions. **82j:28006**
 Boyarsky, Abraham Approximating the σ -finite measure invariant under a nonexpanding map. **82h:28030**
 A bound on the number of invariant measures. **82m:28032**
 (with Haddad, Gabriel) A result related to a theorem by Pianigiani. **82j:28009**
 Burton, Robert M., Jr. A non-Bernoulli skew product which is loosely Bernoulli. **82c:28030**
 Fedorov, A. L. Pairs of measurable partitions, polymorphisms and von Neumann algebras. (Russian) **82f:28020**
 Flytzanis, E. Rigid factors of ergodic transformations. **82c:28031**
 Furstenberg, H. (with Katznelson, Yitzhak) An ergodic Szemerédi theorem for commuting transformations. **82c:28032**
 ★Recurrence in ergodic theory and combinatorial number theory. **82j:28010**
 Gerber, Marlies A zero-entropy mixing transformation whose product with itself is loosely Bernoulli. **82d:28013**
 Goodson, G. R. (with Whitman, P. N.) A skew-product with simple singular spectrum. **82c:28017**
 Haddad, Gabriel See Boyarsky, Abraham, **82j:28009**
 Ito, Yuji Invariant measures and the pointwise ergodic theorem. **82m:28033**
 Jones, Roger L. An analog of the Marcinkiewicz integral in ergodic theory. **82m:28034**
 del Junco, Andres Disjointness of measure-preserving transformations, minimal self-joinings and category. **82m:28035**
 Kakutani, Shizuo (with Petersen, Karl) The speed of convergence in the ergodic theorem. **82g:28022**
 Katznelson, Yitzhak See Furstenberg, H., **82c:28032**
 Keane, Michael S. (with Rauzy, Gérard) Stricte ergodicité des échanges d'intervalles. **82d:28014**
 Keller, Gerhard Piecewise monotonic transformations and exactness. **82g:28023**
 Kimberling, Clark Mixing properties of mixed Chebyshev polynomials. **82c:28033**
 Korvign, A. B. ★Математический анализ динамических систем. (Russian) [Mathematical analysis of dynamical systems] **82c:28018**
 Krzyżewski, K. A remark on the ergodic theorem. **82h:28031**
 Kwiatkowski, J. Invariant measures on the shift space. **82c:28034**
 Ledrappier, François Some properties of absolutely continuous invariant measures on an interval. **82k:28018**
 Maharam, Dorothy An example concerning automorphisms of generalized cubes. **82e:28019**
 Mesiar, Radko A generalization of the individual ergodic theorem. (Russian summary) **82h:28032**
 Petersen, Karl See Kakutani, Shizuo, **82g:28022**
 Rahe, Maurice (with Swanson, Laif) Loose block independence. **82d:28015**
 Rauzy, Gérard Itération des endomorphismes d'un intervalle. [Iteration of the endomorphisms of an interval] (See **82j:10004**)
 See also Keane, Michael S., **82d:28014**
 Rothstein, Arthur Versik processes: first steps. **82c:28035**
 Schweiger, Fritz Ergodic properties of fibered systems. **82c:28019**
 Shields, Paul C. Almost block independence. **82d:28016**
 Sine, Robert C. On invariant probabilities for random rotations. **82e:28020**
 Straube, Emil On the existence of invariant, absolutely continuous measures. **82h:28020**
 Swanson, Laif See Rahe, Maurice, **82d:28015**
 Thaler, Maximilian Estimates of the invariant densities of endomorphisms with indifferent fixed points. **82f:28021**
 Tomatsu, Shizuo Invariant sets of quasimixing transformation with infinite measures. **82c:28036**
 Weiss, Benjamin Orbit equivalence of nonsingular actions. **82j:28011**
 Whitman, P. N. See Goodson, G. R., **82h:28017**
 Yoccoz, Jean-Christophe Sur la disparition de propriétés de type Denjoy-Koksma en dimension 2. (English summary) **82a:28014**
 Yokoi, Yoshitaka Remark on measurability properties for the flow built on a measure preserving transformation under a function. **82c:28037**
 Yoshimoto, T. Some inequalities for ergodic power functions. **82e:28021**

secondary classifications:

- Ahala, Š. I. (with Štepin, A. M.) On invariant measures of noncontracting mappings. (Russian. Georgian and English summaries) **(82i:58040)**
 Akcoglu, Mustafa A. Pointwise ergodic theorems in L_p spaces. **(82h:47004)**
 Aoki, Nobuo A simple proof of the Bernoullicity of ergodic automorphisms on compact abelian groups. **(82d:22010)**
 Barbaini, Franco Chaotic functions and ergodic measures. (Italian. English summary) **(82j:58073)**
 Block, Louis Stability of periodic orbits in the theorem of Šarkovskii. **(82h:58071)**
 Boyarsky, Abraham (with Scarowsky, Manuel) A theorem on the denseness of orbits in metric spaces. **(82d:54017)**
 (with Haddad, Gabriel) All invariant densities of piecewise linear Markov maps are piecewise constant. **(82i:58041)**
 Brin, Michael Bernoulli diffeomorphisms with $n-1$ nonzero exponents. **(82h:58064)**
 Čencova, N. N. Natural invariant measure for the Smale horseshoe. (Russian) **(82d:58033)**
 Collet, Pierre (with Eckmann, Jean-Pierre) On the abundance of aperiodic behaviour for maps on the unit interval. **(82h:58073)**
 Courbage, Maurice (with Misra, Baidyanath) On the equivalence between Bernoulli dynamical systems and stochastic Markov processes. **(82c:82008)**
 Dani, S. G. Dynamics of horospherical flows. **(82d:58034)**
 Eckmann, Jean-Pierre See Collet, Pierre, **(82h:58073)**
 Haddad, Gabriel See Boyarsky, Abraham, **(82i:58041)**
 Jakobson, M. V. Construction of invariant measures absolutely continuous with respect to dx for some maps of the interval. **(82a:58038a)**
 Invariant measures that are absolutely continuous with respect to dx for one-parameter families of one-dimensional mappings. (Russian) **(82a:58038b)**
 Kieffer, John C. (with Rahe, Maurice) Markov channels are asymptotically mean stationary. **(82i:94013)**
 Lasota, Andrzej (with Mackey, Michael C.) The extinction of slowly evolving dynamical systems. **(82a:58029)**
 Lin, Michael On weakly mixing Markov operators and nonsingular transformations. **(82h:47007)**
 Losert, Viktor (with Rindler, Harald) Almost invariant sets. **(82i:43001)**
 Mackey, Michael C. See Lasota, Andrzej, **(82a:58029)**
 Markley, Nelson G. (with Paul, Michael E.) Matrix subshifts for Z' symbolic dynamics. **(82i:54073)**
 Misra, Baidyanath See Courbage, Maurice, **(82c:82008)**
 Mundici, Daniele Ergodic undefinability in set theory and recursion theory. **(82h:03057)**
 Paul, Michael E. See Markley, Nelson G., **(82i:54073)**
 Pianigiani, Giulio Conditionally invariant measures and exponential decay. **(82j:58074)**
 Rahe, Maurice See Kieffer, John C., **(82i:94013)**
 Rauzy, Gérard Échanges d'intervalles et transformations induites. **(82m:10076)**
 Rindler, Harald See Losert, Viktor, **(82i:43001)**
 Rudolph, Daniel (with Steele, J. Michael) Sizes of order statistical events of stationary processes. **(82c:60061)**
 Satō, Ryōtarō Operator averages for subsequences. **(82a:47008)**
 Scarowsky, Manuel See Boyarsky, Abraham, **(82d:54017)**
 Series, Caroline Symbolic dynamics for geodesic flows. **(82f:58071)**
 Steele, J. Michael See Rudolph, Daniel, **(82c:60061)**
 Štepin, A. M. See Ahala, Š. I., **(82i:58040)**
 Stewart, M. Irregularities of uniform distribution. **(82k:10072)**
 Tulipani, Sauro On continuous and invariant measures for a transformation. (Italian. English summary) **(82i:28007)**
 Wong, Sherman Hölder continuous derivatives and ergodic theory. **(82e:58061)**

28D10 One-parameter continuous families of measure-preserving transformations

- Boyarsky, Abraham (with Cooper, Sarah) Weak continuity of invariant measures for a class of piecewise monotonic transformations. **82b:28033**
 Cooper, Sarah See Boyarsky, Abraham, **82b:28033**
 Goodson, G. R. (with Whitman, P. N.) On the spectral properties of a class of special flows. **82d:28017**
 Grillenberger, Christian On generators for ergodic flows. **82a:28015**
 Hesel, K. Extremal distinction of completely ergodic dynamical systems with a quasisdiscrete spectrum. (Russian. English summary) **82e:28022**
 Margulis, G. A. Some remarks on invariant means. **82b:28034**
 Muhlly, Paul S. Isometries of ergodic Hardy spaces. **82d:28018**
 Series, Caroline Foliations of polynomial growth are hyperfinite. **82i:28019**
 Sullivan, Dennis For $n > 3$ there is only one finitely additive rotationally invariant measure on the n -sphere defined on all Lebesgue measurable subsets. **82b:28035**
 Whitman, P. N. See Goodson, G. R., **82d:28017**

secondary classifications:

- Akcoglu, Mustafa A. (with del Junco, Andres) Differentiation of n -dimensional additive processes. (82h:47015)
 Burton, Robert M., Jr. (with Easton, Robert W.) Ergodicity of linked twist maps. (82h:58046)
 Easton, Robert W. See Burton, Robert M., Jr. (82h:58046)
 Goodrich, K. (with Gustafson, Karl E.; Misra, Baidyanath) On converse to Koopman's lemma. (82i:82007)
 Gustafson, Karl E. See Goodrich, K.; et al. (82i:82007)
 del Junco, Andres See Akcoglu, Mustafa A. (82k:47015)
 Misra, Baidyanath See Goodrich, K.; et al. (82i:82007)
 Series, Caroline The Poincaré flow of a foliation. (82i:58072)

28D15 General groups of measure-preserving transformations

- Cakadze, R. A. On completely homogeneous spaces. (Russian. Georgian and English summaries) 82f:28022
 Connes, Alain (with Weiss, Benjamin) Property T and asymptotically invariant sequences. 82e:28023b
 Fedorov, A. I. Pairs of measurable partitionings, polymorphisms and trajectory partitionings. (Russian) 82m:28036
 Kamiński, Brunon Mixing properties of two-dimensional dynamical systems with completely positive entropy. (Russian summary) 82i:28020
 Rubinstein, B. A. Lacunary isomorphism of finitely Bernoulli sequences of measurable partitions. (Russian) 82g:28024
 Safonov, A. V. On the spectral type of ergodic G -induced flows. (Russian) 82g:28025
 Schmidt, Klaus D. Asymptotically invariant sequences and an action of $SL(2, \mathbb{Z})$ on the 2-sphere. 82e:28023a
 Stepin, A. M. (with Tagi-Zade, A. T.) Variational characterization of topological pressure of the amenable groups of transformations. (Russian) 82a:28016
 Tagi-Zade, A. T. See Stepin, A. M. (82a:28016)
 Weiss, Benjamin See Connes, Alain, 82e:28023b

secondary classifications:

- Bezuglyi, S. I. (with Golodec, V. Ja.) Groups of transformations of a space with measure and invariants of outer conjugation for automorphisms from normalizers of complete groups of type III. (Russian) (82h:46083)
 Fichtner, Karl-Heinz (with Freudenberg, W.) Weak ergodic theorems for nonlinear averaging procedures. (82a:60148)
 Freudenberg, W. See Fichtner, Karl-Heinz, (82a:60148)
 Golodec, V. Ja. See Bezuglyi, S. I. (82h:46083)
 Grosu, Corina The entropy and isomorphism of k -finitely determined processes. (82i:28023)
 Kipiani, A. E. The denumerable homogeneity of sets in abstract spaces. (Russian. Georgian and English summaries) (82c:04003)
 Moore, Calvin C. (with Schmidt, Klaus D.) Coboundaries and homomorphisms for nonsingular actions and a problem of H. Helson. (82a:22007)
 Nguyen, Xuan-Xanh Some ergodic theorems for spatial processes. (82g:60046)
 Schmidt, Klaus D. See Moore, Calvin C. (82a:22007)
 Zimmer, Robert J. Strong rigidity for ergodic actions of semisimple Lie groups. (82i:22011)

28D20 Entropy and other invariants

- Feldman, Jacob r -entropy, equipartition, and Ornstein's isomorphism theorem in \mathbb{R}^r . 82c:28038
 Goldstein, Sheldon Entropy increase in dynamical systems. 82i:28021
 (with Penrose, O.) A nonequilibrium entropy for dynamical systems. 82e:28024
 Grosu, Corina The entropy and isomorphism of k -finitely determined processes. 82i:28023
 Gurevii, B. M. Stationary random sequences of maximal entropy. 82d:28019
 Hofbauer, Franz On intrinsic ergodicity of piecewise monotonic transformations with positive entropy. 82c:28039a
 The topological entropy of the transformation $x \mapsto ax(1-x)$. 82e:28025
 On intrinsic ergodicity of piecewise monotonic transformations with positive entropy. II. 82c:28039b
 The maximal measure for linear mod one transformations. 82c:28040
 Kitchens, Bruce An invariant for continuous factors of Markov shifts. 82k:28021
 Misiurewicz, Michał Topological entropy and metric entropy. 82d:28020
 Penrose, O. See Goldstein, Sheldon, 82e:28024
 Simonov, A. A. Measures with maximal entropy for piecewise monotone transformations of an interval. (Russian) 82a:28026
 Tuncel, Selim Conditional pressure and coding. 82j:28012

secondary classifications:

- Aramson, S. H. (with Grines, V. Z.) Homeomorphisms with minimal entropy on two-dimensional manifolds. (Russian) (82h:58037)
 Benettin, Giancarlo (with Froeschlé, C.; Scheidecker, J.-P.) Kolmogorov entropy of a dynamical system with an increasing number of degrees of freedom. (82k:58063)
 Blanchard, Paul (with Franks, John) The dynamical complexity of orientation-reversing homeomorphisms of surfaces. (82i:58073)
 Block, Louis (with Guckenheimer, John; Misiurewicz, Michał; Young, Lai Sang) Periodic points and topological entropy of one-dimensional maps. (82j:58097)
 Coste, Jean Iterations of transformations on the unit interval: approach to a periodic attractor. (82d:58040)
 Coven, Ethan M. (with Reddy, William L.) Positively expansive maps of compact manifolds. (82h:58024)
 Denker, Manfred (with Keane, Michael S.) Almost topological dynamical systems. (82m:54042)

Derriemé, Yves Quelques applications du théorème ergodique sous-additif. (English summary) (82e:60013)

- Franks, John See Blanchard, Paul, (82i:58073)
 Fried, David Efficiency vs. hyperbolicity on tori. (82h:58065)
 Froeschlé, C. See Benettin, Giancarlo; et al. (82k:58063)
 Gerber, Marlies A zero-entropy mixing transformation whose product with itself is loosely Bernoulli. (82d:28013)
 Grines, V. Z. See Aramson, S. H. (82h:58037)
 Guckenheimer, John See Block, Louis; et al. (82j:58097)
 Ito, Shunji See Tanaka, Shigeru, (82j:10086)
 Katok, Anatole Interval exchange transformations and some special flows are not mixing. (82e:58060)
 Katok, Svetlana R. The estimation from above for the topological entropy of a diffeomorphism. (82a:58046)
 Keane, Michael S. See Denker, Manfred, (82m:54042)
 Manneville, Paul See Pomeau, Y., (82c:58042)
 Misiurewicz, Michał (with Szlenk, W.) Entropy of piecewise monotone mappings. (82a:58030)
 See also Block, Louis; et al. (82j:58097)
 Nakada, Hitoshi On the invariant measures and the entropies for continued fraction transformations. (82b:10074)
 Newhouse, Sheldon E. Dynamical properties of certain noncommutative skew-products. (82h:58047)
 Ogata, Shigeo See Suzuki, Masayuki, (82i:58056)
 Oono, Yoshitsugu (with Osikawa, Motosige) Chaos in nonlinear difference equations. I. Qualitative study of (formal) chaos. (82h:58080)
 Osikawa, Motosige See Oono, Yoshitsugu, (82h:58080)
 Padet, Colette Sur une théorie informationnelle de l'observation pour des événements de nature probabiliste. (English summary) (82e:94036)
 Pomeau, Y. (with Manneville, Paul) Intermittency: a generic phenomenon at the onset of turbulence. (82c:58042)
 Pommerenke, Ch. On ergodic properties of inner functions. (82h:30019)
 Przytycki, Feliks An upper estimation for topological entropy of diffeomorphisms. (82j:58032)
 Reddy, William L. See Coven, Ethan M., (82h:58024)
 Rees, Mary A minimal positive entropy homeomorphism of the 2-torus. (82h:58045)
 Sasano, Kazuhiro Topological entropy and periodic points of maps of the circle. (82j:58098)
 Scheidecker, J.-P. See Benettin, Giancarlo; et al. (82k:58063)
 Suzuki, Masayuki (with Ogata, Shigeo) On iterated maps of the interval. (82i:58056)
 Szlenk, W. See Misiurewicz, Michał, (82a:58030)
 Takahashi, Yōichirō A formula for topological entropy of one-dimensional dynamics. (82i:58057)
 Tanaka, Shigeru (with Ito, Shunji) On a family of continued-fraction transformations and their ergodic properties. (82j:10086)
 Watatani, Yasuo Toral automorphisms on irrational rotation algebras. (82m:46073)
 Winkelbauer, Karel Nonergodic stationary information sources. (82h:94013)
 Yano, Koichi A remark on the topological entropy of homeomorphisms. (82h:58082)
 Young, Lai Sang On the prevalence of horseshoes. (82g:58070)
 See also Block, Louis; et al. (82j:58097)

28D99 None of the above, but in this section

- Arnoux, Pierre Échanges d'intervalles et flots sur les surfaces. 82k:28022
 Flytzanis, E. Unitary eigenoperators of ergodic transformations. 82a:28017
 Misiurewicz, Michał The result of Rafał Kołodziej. 82g:28026
 Ramakrishnan, S. (with Rao, B. V.) B -spaces are standard Borel. 82k:28023
 Rao, B. V. See Ramakrishnan, S., 82k:28023
 Serban-Tofan, Dolina The representation of certain (ν)-bounded operators. (Romanian. French summary) 82h:28021
 Veech, William A. A Gauss measure on the set of interval exchange transformations. 82c:28041
 Zable, M. Ergodic properties of general Palm measures. 82f:28024

secondary classifications:

- Aaronson, Jon A remark on the exactness of inner functions. (82h:30018)
 Barkovskii, Ju. S. (with Levin, G. M.) The Cantor limit set. (Russian) (82c:58032)
 Bellomo, Nicola (with Pistone, G.) Time-evolution of the probability density under the action of a deterministic dynamical system. (82d:60102)
 Berry, M. V. Quantizing a classically ergodic system: Sinai's billiard and the KKR method. (82j:81012)
 Blanchard, F. (with Perrin, D.) Relèvement d'une mesure ergodique par un codage. (German summary) (82k:94008)
 Collet, Pierre (with Eckmann, Jean-Pierre) \star Iterated maps on the interval as dynamical systems. (82j:58078)
 Devaney, Robert L. The baker transformation and a mapping associated to the restricted three-body problem. (82m:58036)
 Genealogy of periodic points of maps of the interval. (82e:58081)
 Di Nola, Antonio (with Ventre, Aldo G. S.) On some chains of fuzzy sets. (82d:03088)
 Eckmann, Jean-Pierre See Collet, Pierre, (82j:58078)
 Emilion, R. Processus additifs positifs dans L_∞ . (82k:47016)
 Ito, Ryuichi Rotation sets are closed. (82i:58061)
 Johnson, Russell A. Almost-periodic functions with unbounded integral. (82e:42013)
 Kalinin, V. V. Invariant measures on Boolean algebras. (Russian) (82g:28011)
 Keller, Gerhard Un théorème de la limite centrale pour une classe de transformations monotones par morceaux. (English summary) (82e:60042)
 Levin, G. M. See Barkovskii, Ju. S., (82c:58032)
 Perrin, D. See Blanchard, F., (82k:94008)
 Pianigiani, Giulio First return map and invariant measures. (82a:58031)

- Pistone, G. See Bellomo, Nicola, (82d:60102)
 Saitô, Ryôtarô An extrapolation theorem for contractions with fixed points. (82m:47006)
 Sato, Caroline On coding geodesics with continued fractions. (82b:30052)
 Slawny, Joseph Ergodic properties of equilibrium states. (82b:82011)
 Veksel, A. S. Statistical ergodic theorem and statistical convergence of martingales in symmetric spaces. (Russian) (82b:60008)
 Ventre, Aldo G. S. See Di Nola, Antonio, (82d:93088)

30-XX FUNCTIONS OF A COMPLEX VARIABLE (For analysis on manifolds, see 58-XX.)

30-01 Elementary exposition, textbooks

- Feyel, Denis (with de la Pradelle, Arnaud) ★Ejercicios sobre las funciones analíticas. (Spanish) [Exercises on analytic functions] 82m:30001
 Janich, Klaus ★Einführung in die Funktionentheorie. (German) [Introduction to function theory] 82m:30002
 LePage, Wilbur R. ★Complex variables and the Laplace transform for engineers. 82c:30001
 de la Pradelle, Arnaud See Feyel, Denis, 82m:30001
 (Roblin, V. A.) See Titchmarsh, E. C., 82b:30001
 (Romero Ros, Emilio) See Feyel, Denis; et al., 82m:30001
 Titchmarsh, E. C. ★Теория функций. (Russian) [The theory of functions] 82b:30001

secondary classifications:

- Elimov, A. V. ★Математический анализ (специальные разделы). Часть I. (Russian) [Mathematical analysis (special sections). Part I] (82b:00001a)
 Imai, Isao ★Conformal mappings and their applications. (Japanese) (82j:30013)
 (Lepa, Eugene) See Maurin, Krzysztof, (82b:00003)
 Maurin, Krzysztof ★Analysis. Part II. (82c:00003)

30-02 Advanced exposition (research surveys, monographs, etc.)

- (Browder, Felix E.) See Jones, William B.; et al., 82c:30001
 (Henrici, Peter) See Jones, William B.; et al., 82c:30001
 Jones, William B. (with Thron, Wolfgang J.) ★Continued fractions. 82c:30001
 Strebel, Kurt ★Vorlesungen über Riemannsche Flächen. (German) [Lectures on Riemannian surfaces] 82c:30002
 Thron, Wolfgang J. See Jones, William B., 82c:30001

secondary classifications:

- Cohn, Harvey ★Conformal mapping on Riemann surfaces. (82a:30009)
 Gaier, Dieter ★Vorlesungen über Approximation im Komplexen. (German) [Lectures on approximation in the complex domain] (82c:30055)
 (Havin, V. P.) See Investigations on linear operators and the theory of functions, (82c:46002)
 (Hruščëv, S. V.) See Investigations on linear operators and the theory of functions, (82c:46002)
 Kabaila, V. Function theory. (Russian, Lithuanian and English summaries) (82b:01031)
 (Nikol'skii, N. K.) See Investigations on linear operators and the theory of functions, (82c:46002)
 Complex analysis ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)
 Function theory ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)
 Investigations on linear operators and the theory of functions ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)
 Linear analysis ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)
 Problems:
 Linear and complex analysis ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)

30-03 Historical (must also be assigned at least one classification number from Section 01)

- Sinclair, Annette On development of the Riemann mapping theorem and related results. 82c:30001

secondary classifications:

- Andersen, Kirsti Caspar Wessel and the representation of complex numbers. (Danish. English summary) (82a:01016)
 (Bessel, Friedrich Wilhelm) See Gauß, Carl Friedrich, (82j:01076)
 (Borel, Émile) See Poliščuk, E. M., (82g:01067)
 (Denjoy, Arnaud) See Correspondence: Lévy, Paul, (82g:01034)
 (Fréchet, Maurice) See Correspondence: Lévy, Paul, (82g:01034)
 Gauß, Carl Friedrich ★Werke. Ergänzungssreihe. Band I. (German) [Collected works. Supplementary series. Vol. I] (82j:01076)
 Gud'z, L. A. See Mitropol'skii, Ju. A.; et al., (82f:01123)
 (Hadamard, Jacques) See Mandelbrojt, Szolem, (82b:01041)
 (Kunugi, Kinjirô) See Shibata, Keiichi, (82g:01070)
 (Lévy, Paul) See Correspondence: Lévy, Paul, (82g:01034)
 Mandelbrojt, Szolem ★Selecta. [Selected works] (82b:01041)
 Mitropol'skii, Ju. A. (with Tamrazov, P. M.; Gud'z, L. A.) V. A. Zmorovič's investigations in the field of the geometric theory of functions. (Russian) (82f:01123)

- Neuenschwander, E. Riemann und das "Weierstraßsche" Prinzip der analytischen Fortsetzung durch Potenzreihen. (82b:01025)
 Studies in the history of complex function theory. II. Interactions among the French school, Riemann, and Weierstrass. (82j:01050)
 (Ostrowski, Alexander) See Correspondence: Lévy, Paul, (82g:01034)
 Poliščuk, E. M. ★Заметки Бопеля (1871-1956). (Russian) [Émile Borel (1871-1956)] (82g:01067)
 (Riemann, Georg Friedrich Bernhard) See Neuenschwander, E., (82j:01050)
 Shibata, Keiichi Contributions by Professor Kinjirô Kunugi to the theory of analytic functions of a complex variable and related fields. (82g:01070)
 Tamrazov, P. M. See Mitropol'skii, Ju. A.; et al., (82f:01123)
 (Weierstrass, Karl Theodor Wilhelm) See Neuenschwander, E., (82j:01050)
 (Wessel, Caspar) See Andersen, Kirsti, (82a:01016)
 (Zmorovič, V. A.) See Mitropol'skii, Ju. A.; et al., (82f:01123)
 Bibliography:
 Borel, Émile See Poliščuk, E. M., (82g:01067)
 Mandelbrojt, Szolem See Mandelbrojt, Szolem, (82b:01041)
 Zmorovič, V. A. See Mitropol'skii, Ju. A.; et al., (82f:01123)
 Biography:
 Borel, Émile See Poliščuk, E. M., (82g:01067)
 Zmorovič, V. A. See Mitropol'skii, Ju. A.; et al., (82f:01123)
 Correspondence:
 Gauss, Carl Friedrich-Bessel, Friedrich Wilhelm See Gauß, Carl Friedrich, (82j:01076)
 Lévy, Paul Lettres à Paul Lévy. (82g:01034)

30-04 Explicit machine computation and programs (not the theory of computation or programming)

30-06 Proceedings, conferences, etc.

- (Brannan, David A.) See Aspects of contemporary complex analysis, 82f:30001
 (Clunie, James G.) See Aspects of contemporary complex analysis, 82f:30001
 (Hređelidze, B. V.) See Theory of analytic functions and harmonic analysis, 82d:00009
 (Peschl, Ernst) See Colloquium: Peschl, Ernst, 82d:30001
 Analytic functions ★Теория аналитических функций и гармонический анализ. (Russian) [Theory of analytic functions and harmonic analysis] 82d:00009
 Aspects of contemporary complex analysis ★Aspects of contemporary complex analysis. 82f:30001
 Birthday:
 Peschl, Ernst ★(Vorträge aus dem Festkolloquium zum Anlasse des 70. Geburtstages von Ernst Peschl). (German) [Lectures from the Colloquium on the Occasion of Ernst Peschl's 70th Birthday] 82d:30001
 Bonn ★(Vorträge aus dem Festkolloquium zum Anlasse des 70. Geburtstages von Ernst Peschl). (German) [Lectures from the Colloquium on the Occasion of Ernst Peschl's 70th Birthday] 82d:30001
 Colloquium:
 Peschl, Ernst ★(Vorträge aus dem Festkolloquium zum Anlasse des 70. Geburtstages von Ernst Peschl). (German) [Lectures from the Colloquium on the Occasion of Ernst Peschl's 70th Birthday] 82d:30001
 Complex analysis ★Aspects of contemporary complex analysis. 82f:30001
 Durham ★Aspects of contemporary complex analysis. 82f:30001
 Harmonic analysis ★Теория аналитических функций и гармонический анализ. (Russian) [Theory of analytic functions and harmonic analysis] 82d:00009
 NATO Advanced Study Institute:
 Aspects of Contemporary Complex Analysis ★Aspects of contemporary complex analysis. 82f:30001
 Quasiconformal mappings and Riemann surfaces ★Quasiconformal mappings and Riemann surfaces. 82a:30001
 Symposium:
 Quasiconformal Mappings and Riemann Surfaces ★Quasiconformal mappings and Riemann surfaces. 82a:30001
 Theory of analytic functions and harmonic analysis ★Теория аналитических функций и гармонический анализ. (Russian) [Theory of analytic functions and harmonic analysis] 82d:00009

secondary classifications:

- (Bavrin, I. I.) See Mathematical analysis and the theory of functions, (82g:32001)
 (Fomenko, O. M.) See Analytic number theory and the theory of functions, (82m:10005)
 (Havin, V. P.) See Complex analysis and spectral theory, (82m:46001)
 (Kuz'mina, G. V.) See Analytic number theory and the theory of functions, (82m:10005)
 (Nikol'skii, N. K.) See Investigations on linear operators and the theory of functions, (82b:46002) and Complex analysis and spectral theory, (82m:46001)
 Analytic number theory and the theory of functions ★Аналитическая теория чисел и теория функций. 4. (Russian) [Analytic number theory and the theory of functions. 4] (82m:10005)
 Complex analysis and spectral theory ★Complex analysis and spectral theory. (82m:46001)
 Investigations on linear operators and the theory of functions ★Исследования по линейным операторам и теории функций. XI. (Russian) [Investigations on linear operators and the theory of functions. XI] (82b:46002)
 Leningrad ★Complex analysis and spectral theory. (82m:46001)
 Mathematical analysis and the theory of functions ★Математический анализ и теория функций. (Russian) [Mathematical analysis and the theory of functions] (82g:32001)
 Seminar:
 Complex Analysis and Spectral Theory ★Complex analysis and spectral theory. (82m:46001)
 Theory of functions ★Математический анализ и теория функций. (Russian) [Mathematical analysis and the theory of functions] (82g:32001)

30Axx General properties

30A05 Monogenic properties of complex functions (including polygenic and areolar monogenic functions)

González de Buitrago Díaz, Gonzalo Monogeneity of analytic functions on the boundary. (Spanish) **82f:30002**

secondary classifications:

Bondar, A. V. Mappings possessing a constant rotation operator along cones. (Russian. English summary) **(82c:32026)**

Neagu, Ana Maria See **Rosculeț, Marcel**, **(82c:30054)**

Rosculeț, Marcel (with **Neagu, Ana Maria**) Fonctions quasi monogènes sur des algèbres à radical. (Romanian summary) **(82c:30054)**

30A10 Inequalities in the complex domain

Fitzgerald, Carl H. Quadratic inequalities and univalent functions. **82g:30001**

Haruki, Hiroshi An application of conformal mapping to an inequality for elliptic and hyperbolic segments. **82c:30003**

Nersisjan, A. A. Inequalities of S. N. Mergeljan and V. K. Dzjadik type in a metric of $L(\Gamma)$. (Russian. Azerbaijani and English summaries) **82m:30003**

Viskov, O. V. Power series inversion and the Lagrange formula. (Russian) **82d:30002**

secondary classifications:

Grinšpan, A. Z. Coefficients of powers of univalent functions. (Russian) **(82i:30023)**

Johnston, Elgin H. The boundary modulus of continuity of harmonic functions. **(82a:31002)**

Kahane, Jean-Pierre Polynômes à coefficients unimodulaires sur le cercle unité. **(82c:30027)**

Kapoor, G. P. On the coefficients of analytic functions in the unit disc having nonzero finite order. (Italian summary) **(82m:30007)**

Miśta, Krystyna Sur les inégalités bilinéaires de Grunsky pour les couples de fonctions qui n'empiètent pas l'une sur l'autre. II. **(82i:30015)**

Rovnyak, James A converse to von Neumann's inequality. **(82c:47021)**

Włodarczyk, Kazimierz Analogues of the Garabedian-Schiffer theorem for pairs of vector functions. **(82k:30020)**

30A99 None of the above, but in this section

Kudo, Tatsuji Canonical neighborhoods and a proof of the Jordan separation theorem. **82m:30004**

30Bxx Series expansions**30B10** Power series (including lacunary series)

Anderson, James Milne Le comportement radial des séries lacunaires. (English summary) **82g:30002**

Bogda, Richard A. (with **Shankar, Hari**) Convolutions and growth numbers of analytic functions. **82a:30002**

Gorbačuk, V. I. Reconstruction of analytic functions by the method of point interpolation. (Russian) **82g:30003**

Höholdt, Tom (with **Justesen, Jørn**) Determinants of a class of Toeplitz matrices. **82m:30005**

Indlekofer, Karl-Heinz (with **Trautner, Rolf**) Fortsetzbare äquivalente Potenzreihen. **82m:30006**

Jasiulonis, A. Transformations of power series into trigonometric series and back. (Russian. Lithuanian and German summaries) **82h:30001**

Jörcke, B. A continual analogue of the Fabry theorem. (Russian. English summary) **82c:30002**

Justesen, Jørn See **Höholdt, Tom**, **82m:30005**

Kapoor, G. P. On the coefficients of analytic functions in the unit disc having nonzero finite order. (Italian summary) **82m:30007**

Lippus, Ju. E. Multipliers of uniform convergence of some classes of power series. (Russian) **82g:30004**

Murai, Takafumi The value-distribution of lacunary series and a conjecture of Paley. (French summary) **82k:30002**

Richards, L. Karamata-type operators on the space of uniformly convergent power series. **82f:30003**

Shankar, Hari See **Bogda, Richard A.**, **82a:30002**

Trautner, Rolf See **Indlekofer, Karl-Heinz**, **82m:30006**

Vinogradov, S. A. Multiplicative properties of power series with a sequence of coefficients from \mathbb{P} . (Russian) **82d:30003**

Yamashita, Shinji Gap series and α -Bloch functions. **82k:30003**

secondary classifications:

Agarwal, S. K. See **Mal, Dingur**, **(82j:30075)**

Bajpai, Shyam K. The coefficients of power series giving a coefficients characterization for type. (Italian summary) **(82j:30031)**

Gawronski, Wolfgang (with **Shawyer, B. L. R.**; **Trautner, Rolf**) A Banach space version of Okada's theorem on summability of power series. **(82d:40005)**

Guerrieri, B. See **Hunter, Charles H.**, **(82b:65015a)** and **(82b:65015b)**

Hunter, Charles H. (with **Guerrieri, B.**) Deducing the properties of singularities of functions from their Taylor series coefficients. **(82b:65015a)**

(with **Guerrieri, B.**) Erratum: "Deducing the properties of singularities of functions from their Taylor series coefficients". **(82b:65015b)**

Jensen, Christian U. Propriétés homologiques et logiques des anneaux de fonctions entières. (English summary) **(82k:30057)**

Mal, Dingur (with **Agarwal, S. K.**) Space of a class of meromorphic functions. **(82j:30075)**

Meyerson, Mark D. Every power series is a Taylor series. **(82h:26005)**

Raina, B. K. Generalized Taylor's series and summation. **(82m:40002)**

Shawyer, B. L. R. See **Gawronski, Wolfgang**; et al., **(82d:40005)**

Trahan, Donald H. Regions of convergence for a generalized Lambert series. **(82d:40004)**

Trautner, Rolf See **Gawronski, Wolfgang**; et al., **(82d:40005)**

30B20 Random power series

Sledd, W. T. Random series which are BMO or Bloch. **82k:30004**

secondary classifications:

Bennett, Grahame (with **Stegenga, David A.**; **Timoney, Richard M.**) Coefficients of Bloch and Lipschitz functions. **(82m:30022)**

Stegenga, David A. See **Bennett, Grahame**; et al., **(82m:30022)**

Timoney, Richard M. See **Bennett, Grahame**; et al., **(82m:30022)**

30B30 Boundary behavior of power series, over-convergence

Duchoň, Miloslav Remark on analytic functions in ordered spaces. (Russian summary) **82f:30004**

Tanaka, Chuji On the boundary behavior of Taylor series of the regular functions of some classes in the unit circle. **82f:30005**

secondary classifications:

Lippus, Ju. E. Multipliers of uniform convergence of some classes of power series. (Russian) **(82g:30004)**

Richards, L. Karamata-type operators on the space of uniformly convergent power series. **(82f:30003)**

30B40 Analytic continuation

Blambert, M. (with **Parvatham, R.**) On the singularities of analytic functions defined by L -Dirichletian elements. **82c:30001**

Jarmuhamedov, Š. Analytic continuation of a holomorphic vector along its boundary values on a segment of the border. (Russian) **82g:30005**

Parvatham, R. See **Blambert, M.**, **82i:30001**

Rippon, P. J. On subharmonic functions which satisfy a growth restriction. **82i:30002**

secondary classifications:

Džanašija, G. A. (with **Ozišvili, T. S.**) The uniqueness of the orthogonal decomposition of function rings on a circle. (Russian) **(82a:30059)**

Fitzgerald, Carl H. Quadratic inequalities and univalent functions. **(82g:30001)**

Ganapathy, M. K. See **Swaminathan, V.**, **(82k:40012b)**

Indlekofer, Karl-Heinz (with **Trautner, Rolf**) Fortsetzbare äquivalente Potenzreihen. **(82m:30006)**

Lucht, Lutz Power series with multiplicative coefficients. **(82g:10008)**

Ozišvili, T. S. See **Džanašija, G. A.**, **(82a:30059)**

Stefanescu, I. Sabba On the stable analytic continuation with rational functions. **(82j:30055)**

Swaminathan, V. A note on the $[f, f(x)]$ means. **(82h:40012a)**

(with **Ganapathy, M. K.**) $[f, f(x)]$ summability of Legendre series. **(82h:40012b)**

Thron, Wolfgang J. (with **Waadeland, Haakon**) Analytic continuation of functions defined by means of continued fractions. **(82c:30004)**

Trautner, Rolf See **Indlekofer, Karl-Heinz**, **(82m:30006)**

Waadeland, Haakon See **Thron, Wolfgang J.**, **(82c:30004)**

30B50 Dirichlet series and other series expansions, exponential series [See also 40--XX, 41--XX, 42--XX.]

Abanin, A. V. Representative systems in p -convex domains. (Russian) **82c:30003**

Awasthi, K. N. (with **Dixit, K. K.**) On the logarithmic H -proximate order of analytic functions represented by Dirichlet series. **82h:30002**

Cepelik, G. G. Domains of convergence of series of Taylor-Dirichlet type. (Ukrainian. Russian summary) **82d:30004**

Dickson, D. G. Expansions of arbitrary analytic functions in series of exponentials. **82g:30006**

Dixit, K. K. See **Awasthi, K. N.**, **82h:30002**

Gupta, S. C. See **Vaish, Satendra Kumar**, **82h:30004**

Juneja, O. P. (with **Nandan, Krishna**) On the growth of analytic functions represented by Dirichlet series. **82i:30003**

Korobeinik, Ju. F. Interpolation problems, nontrivial expansions of zero and representative systems. (Russian) **82h:30002**

Krutikolova, E. K. Representation of analytic functions by Dirichlet series in infinite convex domains. (Russian) **82c:30004**

Leon'ev, A. F. Exponential series for functions with prescribed growth near the boundary. (Russian) **82h:30003**

Massa, Silvio (with **Roux, Delfina**) On the lower type of entire functions. (Italian summary) **82c:30005**

Meĭnik, Ju. I. Dirichlet series of functions that are regular in convex polygons. (Russian) **82h:30003**

Nandan, Krishna See **Juneja, O. P.**, **82i:30003**

Nautiyal, A. On the coefficients of an analytic function represented by Dirichlet series. **82i:30004**

Roux, Delfina See **Massa, Silvio**, **82c:30005**

- Safarov, T. M. Generalization of a Fatou-Korevaar theorem. (Russian) **82g:30007**
 Strelitz, Shlomo (with Weit, Yitzhak) Asymptotic behavior of Dirichlet series. **82g:30008**
 Timofeev, A. Ju. Splitting of a sequence of exponential polynomials. (Russian) **82j:30001**
 Vaish, Satendra Kumar On the mean values of an entire Dirichlet series of order zero. **82h:30004**

(with Gupta, S. C.) Logarithmic mean of an entire Dirichlet series. **82h:30004**
 Logarithmic order and logarithmic type of entire Dirichlet series. **82j:30003**
 Generalized logarithmic means of an entire Dirichlet series of order zero. II. **82j:30004**

- A theorem on the means of an entire Dirichlet series of order zero. **82j:30002**
 Vinnickii, B. V. Series in the system $\{f(\lambda_n, z)\}$. (Russian) **82g:30009**
 Weit, Yitzhak See Strelitz, Shlomo, **82g:30008**
 Wimp, Jet On uniqueness sets for expansions in sequences of functions arising from singular generating functions. **82m:30008**

secondary classifications:

- Bajpai, S. S. See Bajpai, Shyam K., (**82h:30020**)
 Bajpai, Shyam K. (with Bajpai, S. S.) The lower type of entire functions represented by Dirichlet series. III. (**82h:30020**)
 Blamert, M. (with Parvatham, R.) On the singularities of analytic functions defined by L -Dirichletian elements. (**82i:30001**)
 Carey, Richard W. (with Pincus, Joel D.) Mean motion, principal functions, and the zeros of Dirichlet series. (**82k:47040**)
 Dirbasjan, Mk. M. (with Zaharjan, V. S.) On the coefficients of expansion of meromorphic functions in generalized Maclaurin series. (Russian) (**82c:30044**)
 Hayashi, Mitsutoshi On some Dirichlet series generated by an arithmetic function. (**82i:10006**)
 Jorické, B. A continual analogue of the Fabry theorem. (Russian. English summary) (**82c:30002**)
 Juneja, O. P. (with Nandan, Krishna; Kapoor, G. P.) On the (p, q) -type and lower (p, q) -type of an entire Dirichlet series. (**82c:30021**)
 (with Srivastava, B. L.) On a Banach space of a class of Dirichlet series. (**82i:46039**)
 Kapoor, G. P. See Juneja, O. P.; et al., (**82h:30021**)
 Korobeinik, Ju. F. Representative systems. (Russian) (**82c:46014**)
 Nandan, Krishna See Juneja, O. P.; et al., (**82h:30021**)
 Parvatham, R. See Blamert, M., (**82i:30001**)
 Pincus, Joel D. See Carey, Richard W., (**82k:47040**)
 Postnikov, A. G. Tauberian theory and its applications. (Russian) (**82i:40012a**)
 Tauberian theory and its applications. (**82i:40012b**)
 Queffelec, Hervé Propriétés presque sûres et quasi-sûres des séries de Dirichlet et des produits d'Euler. (**82c:10050**)
 Ramachandra, K. Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. I. (**82f:10054a**)
 Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. III. (**82f:10054c**)
 Some remarks on the mean value of the Riemann zeta function and other Dirichlet series. II. (**82f:10054b**)
 Reich, Axel Eulerprodukte und diskrete Mittelwerte. (English summary) (**82a:10056**)
 Šemjakina, T. K. Construction of solutions of a third-order nonlinear equation that has given properties at infinity. (Russian) (**82h:34008**)
 Srivastava, B. L. See Juneja, O. P., (**82i:46039**)
 Srivastava, Rajiv Kumar On a class of entire Dirichlet series. (**82j:30076**)
 Zaharjan, V. S. See Dirbasjan, Mk. M., (**82c:30044**)

30B60 Completeness problems, closure of a system of functions

- Barmenkov, A. N. Minimality and orthogonality of a system of functions. (Russian) **82d:30005**
 Brennan, James E. Point evaluations, approximation in the mean and analytic continuation. **82d:30006**
 Dirbasjan, Mk. M. Characteristic of closed linear hulls of two families of incomplete systems of analytic functions. (Russian) **82d:30007**
 Gorgula, V. I. (with Nagnibida, M. I.) The completeness of a system in the space of functions analytic in an annulus. (Russian. English summary) **82f:30006**
 Korobeinik, Ju. F. A criterion of being a basis for a system of functions. (Russian) **82h:30005**
 (with Leont'ev, A. F.) On the property of inward continuability of representing systems of exponentials. (Russian) **82c:30006**
 Leont'ev, A. F. See Korobeinik, Ju. F., **82c:30006**
 Martirosjan, V. M. On the closure, minimality and property of being a basis of the simplest rational fractions on a system of rays. (Russian. Armenian and English summaries) **82g:30010**
 On the closure, minimality and basis property of systems of functions of Mittag-Leffler type in angular domains. (Russian. Armenian and English summaries) **82m:30009**
 Nagnibida, M. I. See Gorgula, V. I., **82f:30006**
 Nikol'skii, N. K. Bases of exponentials and values of reproducing kernels. (Russian) **82c:30007**
 Oskolkov, V. A. The basis property of certain systems of functions. (Russian) **82k:30005**
 Necessary and sufficient conditions for the quasiregular basis property of certain systems of regular functions. (Russian) **82j:30005**
 Volberg, A. L. The completeness of the rational fractions in weighted L^p -spaces on the circle. (Russian) **82i:30005**

secondary classifications:

- Kadampatta, S. N. See Zaharjan, V. P., (**82a:46028**)
 Kirbaljan, A. A. On a generalization of Fejér's kernel. (Russian. Armenian summary) (**82c:30049**)

- Krasnikov-Ternovskii, I. F. Spectral synthesis of analytic functions on systems of convex domains. (Russian) (**82a:46027**)
 Zaharjan, V. P. (with Kadampatta, S. N.) Existence of continuable bases in spaces of functions that are analytic on compacta. (Russian) (**82a:46028**)

30B70 Continued fractions [See also 10A32, 40A15.]

- Bodnar, D. I. (with Kucmins'ka, H. I.) Convergence of an expansion of a function of two variables into a corresponding branching continued fraction. (Russian) **82c:30008**
 Filozof, L. I. Approximation of functions of Herglotz class by continued fractions. (Ukrainian. Russian summary) **82i:30006**
 Gill, John Converging factors for continued fractions $K(a_n/1)$, $a_n \rightarrow 0$. **82k:30006**
 Gragg, William B. Truncation error bounds for T -fractions. **82g:30011**
 Heller, Robert (with Roach, F. A.) A generalization of a classical necessary condition for convergence of continued fractions. **82c:30007**
 Kucmins'ka, H. I. See Bodnar, D. I., **82c:30008**
 Roach, F. A. See Heller, Robert, **82c:30007**
 Thron, Wolfgang J. (with Waadeland, Haakon) Analytic continuation of functions defined by means of continued fractions. **82c:30004**
 Waadeland, Haakon See Thron, Wolfgang J., **82c:30004**

secondary classifications:

- (Browder, Felix E.) See Jones, William B.; et al., (**82c:30001**)
 Buthelet, A. Division algorithms for continued fractions and the Padé table. (**82h:65011**)
 Eliam, I. P. On a linear finite difference equation. (Romanian. French summary) (**82h:39001**)
 Flajolet, Philippe Combinatorial aspects of continued fractions. (**82f:05002b**)
 Combinatorial aspects of continued fractions. (**82f:05002a**)
 (Henrici, Peter) See Jones, William B.; et al., (**82c:30001**)
 Jones, William B. (with Thron, Wolfgang J.) ★ Continued fractions. (**82c:30001**)
 Thron, Wolfgang J. See Jones, William B., (**82c:30001**)
 Van der Cruyssen, P. Linear difference equations and generalized continued fractions. (German summary) (**82c:65129**)

30B99 None of the above, but in this section

- Avetisjan, R. A. On the representation of analytic functions by series of simple fractions in the closed disc. (Russian. Armenian and English summaries) **82g:30012**
 Cuesta Dutari, N. Oscillation sets of $\sum_{0 \leq j < \infty} z^j$ and $\prod_{0 \leq j < \infty} (1 + z^{2^j})$. (Spanish) **82c:30009**
 Jertić, M. Some properties of new Hadamard products of analytic functions. (Serbo-Croatian. English summary) **82d:30008**

secondary classifications:

- Focke, Ralph Convergence properties of linear recursion sequences. (**82j:40001**)
 Püning, Jürgen Riemannfunktionen mit speziellen Potenzreihenentwicklungen. (English summary) (**82c:35019**)

30Cxx Geometric function theory

secondary classifications:

- Bauer, Karl Wilhelm (with Ruscheweyh, Stephan) ★ Differential operators for partial differential equations and function theoretic applications. (**82d:35012**)
 Ruscheweyh, Stephan See Bauer, Karl Wilhelm, (**82d:35012**)

30C10 Polynomials

- Aziz, Abdul (with Mohammad, Q. G.) Growth of polynomials with zeros outside a circle. **82c:30005**
 Durand, Alain On Mahler's measure of a polynomial. **82j:30006**
 Erdős, Paul Problems and results on polynomials and interpolation. **82g:30013**
 Jain, V. K. On the zeros of polynomials. **82k:30008**
 Kahane, Jean-Pierre Sur les polynômes à coefficients unimodulaires. **82a:30003**
 Khan, Aijaz Ahmad See Zaheer, Neyamat, **82h:30007**
 Matveeva, L. V. Estimate of the rate of convergence of a sequence of Gronwall polynomials. II. (Russian) **82h:30005**
 Mikrtjan, M. A. A problem of Young. (Russian) **82j:30007**
 Mohammad, Q. G. See Aziz, Abdul, **82c:30005**
 Newman, Donald J. Polynomials and rational functions. **82h:30006**
 Rubinstein, Zalman Solution of the middle coefficient problem for certain classes of C -polynomials. **82a:30004**
 Weit, Yitzhak A characterization of polynomials by convolution equations. **82m:30010**
 Zaheer, Neyamat (with Khan, Aijaz Ahmad) Cross-ratio theorems on generalized polars of abstract homogeneous polynomials. **82h:30007**

secondary classifications:

- Arumraj, Y. Eben See Bhattacharyya, P., (**82h:30034**)
 Bhattacharyya, P. (with Arumraj, Y. Eben) On the structure of the Fatou set for the polynomial $z^3 + pz$, $p < -3$. (**82h:30034**)
 Case, K. M. See Geronimo, Jeffrey S., (**82c:81138**)
 Geronimo, Jeffrey S. (with Case, K. M.) Scattering theory and polynomials orthogonal on the real line. (**82c:81138**)
 Kahane, Jean-Pierre Polynômes à coefficients unimodulaires sur le cercle unité. (**82c:30027**)
 Nguen T'en Tai On the estimates of zero orders of polynomials of analytic functions and their application to estimates of the measure of mutual transcendence of E -function values. (Russian) (**82d:10043**)
 Postnikov, M. M. ★ Устойчивые многочлены. (Russian) [Stable polynomials] (**82k:12023**)

- Sedleckii, A. M. Extension of the convergence of quasipolynomials. (Russian) (82f:30025)
- Waadeland, Haakon Some univalent compositions of polynomials with univalent functions. (82e:30021)
- 30C15 Zeros of polynomials, rational functions, and other analytic functions (e.g. zeros of functions with bounded Dirichlet integral) [For algebraic theory, see 12D10; for real methods, see 26C10.]
- Abian, Alexander The precise annuli containing the zeros of polynomials. 82f:30007
- Anderson, Ned (with Saff, E. B.; Varga, R. S.) An extension of the Eneström-Kakeya theorem and its sharpness. 82b:30007
- Boyd, David W. Reciprocal polynomials having small measure. 82a:30005
- Brenner, J. L. (with Lyndon, Roger C.) Proof of the fundamental theorem of algebra. 82e:30010
- Deutsch, Emeric Bounds for the zeros of polynomials. 82j:30008
- Durand, Alain Relation de Szegő sur la dérivée d'un polynôme. 82e:30011
- Govorov, N. V. (with Lapenko, Ju. P.) Lower bounds for the modulus of the logarithmic derivative of a polynomial. (Russian) 82b:30006
- Lapenko, Ju. P. See Govorov, N. V., 82b:30006
- Ljubiškin, V. A. See Sadorov, V. A., 82b:30006
- Lyndon, Roger C. See Brenner, J. L., 82e:30010
- Paljutkin, V. G. On zeros of functions represented by series of simple fractions. (Russian) 82b:30008
- Pták, Vlastimil (with Young, N. J.) A generalization of the zero location theorem of Schur and Cohn. 82a:30006
- Sadorov, V. A. (with Ljubiškin, V. A.) Regularized sums of the roots of a class of entire functions of exponential type. (Russian) 82c:30006
- Saff, E. B. See Anderson, Ned; et al., 82b:30007
- Simeonovic, D. M. Sur la répartition des zéros d'une classe de polynômes. [On zero distribution in a polynomial class] 82m:30011
- Varga, R. S. See Anderson, Ned; et al., 82b:30007
- Walach, Eugene (with Zeheb, Ezra) On multivariable half-plane analyticity and positive realness. 82j:30009
- Yang, Chung Chun On nonreal complex roots of a certain class of entire functions. 82j:30010
- Young, N. J. See Pták, Vlastimil, 82a:30006
- Zeheb, Ezra See Walach, Eugene, 82j:30009

secondary classifications:

- Arimoto, Suguru See Monden, Yoshimi, (82k:94015)
- Bolotov, V. A. Correspondence between roots and coefficients of multidimensional systems of algebraic equations. (Russian) (82j:32012)
- Bridges, Douglas S. On the isolation of zeroes of an analytic function. (82k:03095)
- Bronstein, M. D. Smoothness of roots of polynomials depending on parameters. (Russian) (82e:26018)
- Chollet, Anne-Marie Carleson sets in C^n , $n \leq 1$. (82g:32020)
- Craven, Thomas C. (with Csordas, George) Zero-diminishing linear transformations. (82a:12013)
- Csordas, George See Craven, Thomas C., (82a:12013)
- Datta, Biswa Nath A relationship between a Hankel matrix of Markov parameters and the associated polynomial matrix with some applications. (82b:93030)
- Matrix equation, matrix polynomial and the number of zeros of a polynomial inside the unit circle. (82e:15005)
- Hädeler, K. P. (with Meinardus, Günter) On the roots of Cauchy polynomials. (82k:52016)
- Litvinov, A. P. Hankel and other matrices generated by rational fractions. (Russian) (82e:15013)
- Meinardus, Günter See Hädeler, K. P., (82k:52016)
- Mikrtejan, M. A. A problem of Young. (Russian) (82j:30007)
- Monden, Yoshimi (with Arimoto, Suguru) Generalized Rouché's theorem and its application to multivariate autoregressions. (82k:94015)
- Pan, Cheng Biao A simplification of the proof of Levinson's theorem. (Chinese. English summary) (82e:10070)
- Petković, Miodrag S. On a generalisation of the root iterations for polynomial complex zeros in circular interval arithmetic. (German summary) (82g:30068)
- Petrenko, V. P. The growth of Q -pseudomeromorphic solutions of difference equations. (Russian) (82f:39003)
- Srivastava, G. S. On the zeros of successive derivatives of an entire function. (82m:30028)
- Stănişilă, O. See Stanomir, D., (82e:94067)
- Stanomir, D. (with Stănişilă, O.) On real-rational holomorphic matrices. (Romanian. English summary) (82e:94067)
- Stolarsky, Kenneth B. Zero-free regions of exponential sums. (82k:32008)
- Vitória, José Generalization of inequalities by Carmichael and Mason and by Parodi. (German summary) (82g:15013)
- Latent roots of lambda-matrices, Kronecker sums and matricial norms. (Czech summary) (82a:15019)

30C20 Conformal mappings of special domains

- Bereslavskii, È. N. Conformal mapping of a half plane on circular quadrangles and pentagons with a cut. (Russian) 82j:30011
- Conformal mapping of a half plane onto circular pentagons with cuts. (Russian. English summary) 82j:30012
- Conformal mapping, onto a rectangle, of circular quadrangles with two straight lines and two arbitrary angles. (Russian) 82g:30014
- Clarke, S. See Owen, David Rudyard; et al., 82c:30007
- Gaydon, F. A. (with Sayer, F. P.) The transformation of concentric circles into concentric rectangles. 82i:30007

- Imai, Isao ★Conformal mappings and their applications. (Japanese) 82j:30013
- Owen, David Rudyard (with Sunderji, B.; Clarke, S.) An inverse method for the mapping of curves onto the real axis. 82c:30007
- Sayer, F. P. See Gaydon, F. A., 82i:30007
- Sunderji, B. See Owen, David Rudyard; et al., 82c:30007

secondary classifications:

- Haruki, Hiroshi On a theorem of inversive geometry. (82b:51020)
- Nguyen Van Lam On Möbius transformations in a Hilbert space. (82f:46024)
- Vasilević, Ju. V. A plane mixed problem of thermoelasticity for a plane with a reinforced aperture. (Russian) (82m:73012)

30C25 Covering theorems in conformal mapping theory

- Byers, Robert B. (with Merkes, E. P.) Subordinations for typically real and related functions. 82g:30015
- Merkes, E. P. A covering theorem for odd typically real functions. 82e:30008
- See also Byers, Robert B., 82g:30015

30C30 Numerical methods in conformal mapping theory [See also 65E05.]

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- Schober, Glenn See Bshouty, D.; et al., **(82f:30009)**
- Skalska, Krystyna Certain subclasses of the class of typically real functions. **(82a:30018)**

30C55 General theory of univalent and multivalent functions

- Al-Amiri, Hassoon S. (with Mocanu, Petru T.) Certain sufficient conditions for univalence of the class C' . **82g:30033**
- Aleksandrov, I. A. A case of integration of the Löwner equation. (Russian) **82f:30017**
- (with Mandik, V. P.) Extremal properties of simultaneously p -valent functions. (Russian) **82i:30028**
- Aleneyan, Ju. E. On the theory of functions p -sheeted in the mean in multiply connected domains. (Russian) **82f:30018**
- Becker, Jochen Conformal mappings with quasiconformal extensions. **82g:30034**
- A problem in univalent-function theory. **82c:30019**
- Brannan, David A. The Löwner differential equations. **82i:30029**
- Brown, Johnny E. Univalent functions maximizing $\operatorname{Re}(a_3 + \lambda a_2)$. **82j:30022**
- Duren, Peter L. Extremal problems for univalent functions. **82h:30013**
- Hamilton, David Extremal problems for nonvanishing univalent functions. **82g:30035**
- Hayman, Walter Kurt The logarithmic derivative of multivalent functions. **82a:30022**
- Hu, Ke On the distortion theorem of schlicht functions. **82j:30023**
- Kirwan, W. E. Extremal properties of slit conformal mappings. **82g:30036**
- Lebedev, N. A. Range of values of a functional in a class of bounded univalent functions. (Russian. English summary) **82m:30025**
- Lehtinen, Matti On the inner radius of univalence for noncircular domains. **82c:30020**
- Lewandowski, Zdzisław On a univalence criterion. (Russian summary) **82k:30023**
- Mandik, V. P. See Aleksandrov, I. A., **82i:30028**
- Michel, C. See Pirl, U., **82c:30021**
- Mocanu, Petru T. See Al-Amiri, Hassoon S., **82g:30033**
- Pirl, U. (with Michel, C.) Normalformen für schlichte endlich-vielfach

zusammenhängende Gebiete bezüglich schlichter konformer Abbildung mit vier Fixpunkten. **82c:30021**
Sahalin, P. L. Univalence classes and V. I. Smirnov's domains. (Russian) **82c:30022**
Singh, Prem (with Tygel, Martin) On some univalent functions in the unit disc. **82c:30024**

Singh, Ram See **Singh, Sunder**, **82f:30019**
Singh, Sunder (with Singh, Ram) Subordination by univalent functions. **82f:30019**
Todorov, Pavel G. Uniqueness of the maximal univalence domain of the derivative class $\Phi^{(p-1)}(R_+)$ of the rational class $\Phi(R_+)$. (Russian. Lithuanian and French summaries) **82j:30024**

Tygel, Martin See **Singh, Prem**, **82c:30024**

secondary classifications:

Becker, Jochen Some inequalities for univalent functions with quasiconformal extensions. (82f:30020)
Bogucki, Z. (with Zderkiewicz, J.) Sur un problème de Jenkins pour les fonctions convexes. (82g:30020)
Brandt, Manfred Ein Existenzsatz für schlicht-konforme Abbildungen endlich-vielfach zusammenhängender Gebiete bei höherer Normierung. (Polish summary) (82g:30017)
Brown, Johnny E. Derivatives of close-to-convex functions, integral means and bounded mean oscillation. (82j:30046)
Chiba, Tadasu A note on the Riemann mapping theorem. (82g:30018)
Fitzgerald, Carl H. Quadratic inequalities and univalent functions. (82g:30001)
Jackson, R. J. V. An expansion of the L -kernel over domains in the complex plane. (82c:30009)
Lappan, Peter On the normality of derivatives of functions. II. (82m:30031)
Minda, Carl David The image of the Ahlfors function. (82m:30035)
Pell, Richard Support point functions and the Loewner variation. (82a:30014)
Shah, Swarupchand M. (with Trimble, S. Y.) Analytic functions with univalent derivatives. (82a:30016)
Štyk, V. A. Some estimates in an annulus for weakly univalent functions that omit values on a circle. (Russian) (82m:30019)
Trimble, S. Y. See **Shah, Swarupchand M.**, (82a:30016)
Wu, Jiang Mei G. Harmonic measures and level sets of conformal mappings. (82c:30015)
Zderkiewicz, J. See **Bogucki, Z.**, (82g:30020)
Zemlyan, Stephen M. A minimal outer area problem in conformal mapping. (82i:30022)

30C60 Quasiconformal mappings

Andreian Cazacu, Cabiria On the geometric definition of the quasiconformality. **82f:30037**
Andrievskii, V. V. (with German, S. P.) Approximation on quasiconformal arcs. (Russian. English summary) **82c:30022**
Aseev, V. V. The structure of a topological group of quasiconformal mappings on the sphere. (Russian) **82a:30024**
Batšev, I. M. Inequalities for algebraic polynomials and approximation theorems in domains with quasiconformal boundary. (Russian. Azerbaijani and English summaries) **82a:30025**
Becker, Jochen Some inequalities for univalent functions with quasiconformal extensions. **82f:30020**
Cricunias, Silviu Applications quasi-conformes sur des produits finis d'espaces normés. [Quasiconformal mappings on finite products of normed spaces] **82m:30026**
Fang, Ai Nong Riemann's existence theorem for nonlinear quasiconformal mappings. (Chinese) **82i:30030**
German, S. P. See **Andrievskii, V. V.**, **82c:30022**
Gol'dštejn, V. M. Continuation of functions and mappings that preserve classes of functions. (Russian) **82f:30021**
 See also **Vodop'janov, S. K.**; et al., **82c:30025**
Hag, Kari (with Näätänen, Marjatta) On the outer coefficient of quasiconformality of a cylindrical map of a convex dihedral wedge. **82b:30014**
 The coefficients of quasiconformality of tori in n -space. **82b:30015**
Jerison, David (with Weitsman, Allen) On the means of quasiregular and quasiconformal mappings. **82m:30027**
Karmazin, A. P. (with Kufarev, B. P.) A family of $BL^{3/2}$ -homeomorphisms of a ball in \mathbb{R}^3 that is meager in \mathcal{B} . (Russian) **82c:30023**
 (with Kufarev, B. P.) Some metric conditions for convergence to a kernel. (Russian) **82c:30024**
Kolomoiceva, Z. D. Estimation of $|c_n|$ depending on $|c_2|$ in the subclass S of quasiconformal functions. (Russian. English summary) **82c:30025**
Kopylov, A. P. See **Vodop'janov, S. K.**; et al., **82c:30025**
Kra, Irwin On Teichmüller's theorem on the quasi-invariance of cross ratios. **82a:30026**
Kruškal', S. L. A remark on the rigidity of quasiconformal deformations of discrete isometry groups of hyperbolic spaces. (Russian) **82d:30018**
 Invariant metrics and quasiconformal mappings. (Russian) **82j:30025**
Kud'javin, V. S. Sequential rotation of plane quasiconformal mappings in \mathbb{R}^n . (Russian) **82a:30027**
Kufarev, B. P. See **Karmazin, A. P.**, **82c:30023** and **82c:30024**
Kühnau, Reiner Über die Werte des Doppelverhältnisses bei quasikonformer Abbildung. **82a:30028**
 Eine Kernfunktion zur Konstruktion gewisser quasikonformer Normalabbildungen. **82c:30026**
Kveselava, D. A. (with Samsonija, Z. V.) Quasiconformal mapping of domains. (Russian) **82b:30016**
Lehto, Olli Application of singular integrals to extremal mappings of Riemann surfaces. (Russian summary) **82c:30027**
Levickii, B. E. A class of extremal quasiconformal mappings in space. (Russian) **82b:30017**
Martio, Olli Definitions for uniform domains. **82c:30028**
 New methods in injectivity theorems connected with Schwarzian derivative. **82k:30025**

Mitić, Vladimir Quasiconformal mappings in a space. (Serbo-Croatian. English summary) **82b:30018**
Miniovitz, Ruth Spherically mean p -valent quasiregular mappings. **82c:30023**
Näätänen, Marjatta See **Hag, Kari**, **82b:30014**
Näkki, Raimo (with Palka, Bruce) Quasiconformal circles and Lipschitz classes. **82a:30029**

Okabe, Katsuyuki On some open problems in the theory of quasiconformal mappings. II. Area distortion under quasiconformal mappings. **82c:30024**
Palka, Bruce See **Näkki, Raimo**, **82a:30029**
Rickman, Seppo Asymptotic values and angular limits of quasiregular mappings of a ball. **82b:30019**

Samsonija, Z. V. See **Kveselava, D. A.**, **82b:30016**
Semenov, V. I. Necessary conditions in extremal problems for spatial quasiconformal mappings. (Russian) **82a:30019**
 On sufficient conditions for extremal quasiconformal mappings in space. (Russian) **82b:30014**

Šereto, V. G. Extremal quasiconformal mappings with a given boundary homeomorphism. (Russian) **82b:30020**

Sorvali, Tuomas Angles and quasiconformal mappings. (Finnish. English summary) **82c:30029**

Syčev, Vjačeslav Vladimirovič ★Пространственные квазиконформные отображения. (Russian) [Three-dimensional quasiconformal mappings] **82c:30030**

Trocenko, D. A. Properties of regions with a nonsmooth boundary. (Russian) **82b:30015**
Tukia, Pekka On two-dimensional quasiconformal groups. **82c:30031**

(with Väisälä, Jussi) Quasisymmetric embeddings of metric spaces. **82g:30038**
Väisälä, Jussi Quasisymmetric embeddings in Euclidean spaces. **82i:30031**

See also **Tukia, Pekka**, **82g:30038**

Vodop'janov, S. K. (with Gol'dštejn, V. M.; Kopylov, A. P.) On boundary values of quasiconformal mappings in space. **82c:30025**

Vuorinen, Matti Cluster sets and boundary behavior of quasiregular mappings. **82a:30030**
 On the boundary behavior of locally K -quasiconformal mappings in space. **82c:30032**

On the existence of angular limits of n -dimensional quasiconformal mappings. **82b:30016**

Weitsman, Allen See **Jerison, David**, **82m:30027**

Zahirov, M. The method of integrating multipliers in the theory of general quasiconformal mappings. (Russian) **82a:30020**

secondary classifications:

Andrievskii, V. V. (with Bilii, V. I.) Approximation of functions in domains with a quasiconformal boundary. (Russian) (82f:30034)
Becker, Jochen Conformal mappings with quasiconformal extensions. (82g:30034)
 A problem in univalent-function theory. (82c:30019)
Bilii, V. I. See **Andrievskii, V. V.**, (82f:30034)
Gauld, David B. Lipschitz and quasiconformal tubular neighbourhoods of spheres in codimension two. (82b:57009)
Iwaniec, Tadeusz (with Kopiecki, Ryszard) Stability in the differential equations for quasiregular mappings. (82f:35020)
Kopiecki, Ryszard See **Iwaniec, Tadeusz**, (82f:35020)
Kusumoki, Yukio (with Taniguchi, Masahiko) A continuity property of holomorphic differentials under quasiconformal deformations. (82g:30076)
Ławrynowicz, Julian On biholomorphic continuability of regular quasiconformal mappings. (82a:32033)
Maitani, Fumio Remarks on the isomorphisms of certain spaces of harmonic differentials induced from quasiconformal homeomorphisms. (82c:30068)
Martio, Olli Reflection principle for solutions of elliptic partial differential equations and quasiregular mappings. (82m:35048)
Monahov, V. N. (with Plotnikov, P. I.) Quasiconformal mappings and problems of hydrodynamics. (Russian) (82e:76001)
Petridis, Nicholas C. Generalizations of Picard's first theorem. (82g:53047)
 Distance and volume decreasing theorems for quasiconformal mappings. (82j:32055)
Plotnikov, P. I. See **Monahov, V. N.**, (82e:76001)
Taniguchi, Masahiko See **Kusumoki, Yukio**, (82g:30076)
Weisel, Jutta Approximation quasikonformer Abbildungen mehrfach zusammenhängender Gebiete durch finite Elemente. (English summary) (82g:30016)
Quasiconformal mappings and Riemann surfaces ★Quasiconformal mappings and Riemann surfaces. (82a:30001)
 Symposium:
Quasiconformal Mappings and Riemann Surfaces ★Quasiconformal mappings and Riemann surfaces. (82a:30001)

30C70 Extremal problems for conformal and quasiconformal mappings, variational methods

Bahtin, O. K. On functions of the Gel'fer class. (Russian) **82f:30022**
 See also **Bahtina, G. P.**, **82f:30023**
Bahtina, G. P. (with Bahtin, O. K.) Some extremal problems of nonoverlapping domains. (Russian) **82f:30023**
Harrington, Andrew N. Extremal conformal mappings of many-component sets onto sets bounded by generalized lemniscates. **82k:30026**
Hummel, James A. (with Pinchuk, Bernard; Schiffer, Menahem M.) Bounded univalent functions which cover a fixed disc. **82a:30031**
Kobayashi, Shōji (with Suita, Nobuyuki) On analytic diameters and analytic centers of compact sets. **82k:30027**
Kühnau, Reiner Zur Moduländerung eines Vierecks bei quasikonformer Abbildung. **82f:30024**
Kuz'mina, G. V. On the problem of the maximum of the product of conformal radii of nonoverlapping domains. (Russian) **82c:30033**
 See also **Kuznecov, V. O.**, **82c:30034**

- Kuznecov, V. O. (with Kuz'mina, G. V.) On the problem of the maximum of the n th diameter on the hyperbolic plane. (Russian) **82c:30034**
- Mitjuk, I. P. Estimates in certain classes of analytic functions. (Russian) **82i:30032**
- Netanyahu, E. (with Pinchuk, Bernard) Symmetrization and extremal bounded univalent functions. **82a:30032**
- Paul, Surinder See Singh, Vikramaditya, **82g:30039**
- Pinchuk, Bernard See Hummel, James A.; et al., **82a:30031** and Netanyahu, E., **82a:30032**
- Schiffer, Menahem M. See Hummel, James A.; et al., **82a:30031**
- Singh, Vikramaditya (with Paul, Surinder) Constrained extremal problems for symmetric functions with real part positive. **82g:30039**
- Suita, Nobuyuki See Kobayashi, Shōji, **82k:30027**

secondary classifications:

- Bahtin, O. K. On coefficients of functions of class S . (Russian) (**82m:30012**)
- Boutellier, Roman (with Pfluger, Albert) Some extremal problems for functions of bounded boundary rotation. (**82g:30021**)
- Brown, Johnny E. Univalent functions maximizing $\operatorname{Re}(a_3 + \lambda a_2)$. (**82j:30022**)
- Goel, R. M. (with Mehrotra, Beant Singh) On a class of close-to-convex functions. (**82e:30017**)
- Jondro, Halina Sur une méthode variationnelle dans la famille des fonctions de Grunsky-Shah. (English and Russian summaries) (**82m:30015**)
- Mehrotra, Beant Singh See Goel, R. M., (**82e:30017**)
- Pfluger, Albert See Boutellier, Roman, (**82g:30021**)
- Umarani, Prakash G. On a generalized class of functions of bounded boundary rotation. (French summary) (**82i:30021**)

30C75 Extremal problems for conformal and quasiconformal mappings, other methods

- Alenicyan, Ju. E. Inequalities for generalized areas in the case of multivalent conformal mappings of domains with circular slits. (Russian) **82g:30040**
- Antonjuk, G. K. Extremal properties of certain canonical conformal mappings. (Russian) **82c:30035**
- Gevirtz, Julian An upper bound for the John constant. **82j:30026**
- Hempel, Joachim A. Precise bounds in the theorems of Landau and Schottky. **82h:30017**
- Pfluger, Albert Nonlinear extremal problems for starlike functions. **82a:30033**

secondary classifications:

- Dittmar, Bodo Bemerkungen zu einem Funktional von M. Schiffer und N. S. Hawley in der Theorie der konformen Abbildungen. (**82e:30013**)
- Forelli, Frank A necessary condition on the extreme points of a class of holomorphic functions. II. (**82k:32021**)
- Gardiner, Frederick P. On a notion of quasiconformal rigidity for Riemann surfaces. (**82m:30048**)
- Gud'z, L. A. See Zmorović, V. A., (**82m:30021**)
- Hamilton, David Extremal problems for nonvanishing univalent functions. (**82g:30035**)
- Jaremenko, L. A. Extremal properties of certain classes of regular functions. (Russian) (**82m:30014**)
- Jerison, David (with Weitsman, Allen) On the means of quasiregular and quasiconformal mappings. (**82m:30027**)
- Kirwan, W. E. Extremal properties of slit conformal mappings. (**82g:30036**)
- Kühnau, Reiner Zur Moduländerung eines Vierecks bei quasikonformer Abbildung. (**82i:30024**)
- Ruscheweyh, Stephan Neighborhoods of univalent functions. (**82c:30016**)
- Schiffer, Menahem M. Fredholm eigenvalues and Grunsky matrices. (**82k:30010**)
- Styer, D. (with Wright, Donald J.) Results on bi-univalent functions. (**82c:30018**)
- Turzynski, Antoni On a subclass of starlike functions. (Polish and Russian summaries) (**82k:30017**)
- Weitsman, Allen See Jerison, David, (**82m:30027**)
- Wright, Donald J. See Styer, D., (**82c:30018**)
- Zmorović, V. A. (with Gud'z, L. A.) On a method of the theory of extremal problems. (Russian. English summary) (**82m:30021**)

30C80 Maximum principle; Schwarz' lemma, Lindelöf principle, analogues and generalizations; subordination

- Abu-Muhanna, Yusuf (with MacGregor, Thomas H.) Extreme points of families of analytic functions subordinate to convex mappings. **82d:30021**
- Fuchs, W. H. J. A Phragmén-Lindelöf theorem conjectured by D. J. Newman. **82g:30041**
- Gorjainov, V. V. Extremal properties of certain classes of analytic functions. (Russian) **82c:30036**
- Humphries, Michael D. The Phragmén-Lindelöf principle. **82c:30026**
- Kahane, Jean-Pierre Polynômes à coefficients unimodulaires sur le cercle unité. **82e:30027**
- MacGregor, Thomas H. See Abu-Muhanna, Yusuf, **82d:30021**
- Maddox, Ivor J. Schwarz' lemma and convergent series. **82e:30028**
- Miller, Sanford S. (with Mocanu, Petru T.) On classes of functions subordinate to the Koebe function. **82i:30033**
- Mocanu, Petru T. See Miller, Sanford S., **82i:30033**
- Yamashita, Shinji The hyperbolic M. Riesz theorem. **82i:30034**

secondary classifications:

- Anghel, Nicolae A direct proof of the fact that $L^1(X, B, \mu)$ satisfies the strong maximum modulus principle. (Romanian. English summary) (**82g:46050**)
- Byers, Robert B. On growth of typically real functions and a related class. (**82i:30010**)
- (with Merkes, E. P.) Subordinations for typically real and related functions. (**82g:30015**)

- Goel, R. M. (with Mehrotra, Beant Singh) On the coefficients of a subclass of starlike functions. (**82g:30026**)
- Hwang, Jun Shung Some analogs of function theory in operator theory. (**82d:47024**)
- Kuz'mina, G. V. On the problem of the maximum of the product of conformal radii of nonoverlapping domains. (Russian) (**82c:30033**)
- Mehrotra, Beant Singh See Goel, R. M., (**82g:30026**)
- Merkes, E. P. See Byers, Robert B., (**82g:30015**)
- Szapiet, Maria Sur la subordination dans la classe des fonctions typiquement réelles. (**82a:30019**)

30C85 Capacity and harmonic measure in the complex plane [See also 31A15.]

- Abikoff, William On the boundary behavior of functions in the spherical Dirichlet class. **82j:30027**
- Øksendal, Bernt Sets of harmonic measure zero. **82k:30028**
- Zorin, N. V. Estimates of capacities and energies in capacitor reconstruction. (Russian) **82e:30029**

secondary classifications:

- Airapetjan, A. N. On a generalization of Fatou's theorem. (Russian. Armenian summary) (**82k:30033**)
- Colton, David L. The inverse electromagnetic scattering problem for a perfectly conducting cylinder. (**82e:78004**)
- Fisher, S. D. (with Micchelli, Charles A.) The n -widths of sets of analytic functions. (**82j:30052**)
- Jakovlev, V. I. The connection between the growth of a subharmonic function and the distribution of the associated measure. (Russian) (**82m:31003a**)
- On the connection between the growth of the mean values of a subharmonic function and the distribution of the associated measure. (Russian) (**82m:31003b**)
- Janik, Adam On approximation and interpolation of entire functions. (**82g:30065**)
- Kuz'mina, G. V. See Kuznecov, V. O., (**82c:30034**)
- Kuznecov, V. O. (with Kuz'mina, G. V.) On the problem of the maximum of the n th diameter on the hyperbolic plane. (Russian) (**82c:30034**)
- Lubinsky, D. S. Diagonal Padé approximants and capacity. (**82c:30050**)
- Matyska, Jiří An example of removable singularities for bounded holomorphic functions. (Czech summary) (**82k:30035**)
- Micchelli, Charles A. See Fisher, S. D., (**82j:30052**)
- Niimura, Mikio Asymptotic point sets of analytic mappings. (**82f:30028**)
- Schneider, Walter J. Approximation and harmonic measure. (**82g:30058**)
- Tamazov, P. M. A. A. Gončar's extremal problem on capacities of condensers, and the method of mixing of charges. (Russian) (**82i:31002**)
- Wu, Jang Mei G. Harmonic measures and level sets of conformal mappings. (**82c:30015**)

30C99 None of the above, but in this section

- Al-Amiri, Hassoon S. (with Mocanu, Petru T.) Spirallike nonanalytic functions. **82j:30028**
- Mocanu, Petru T. See Al-Amiri, Hassoon S., **82j:30028**
- Sedleckii, A. M. Extension of the convergence of quasipolynomials. (Russian) **82f:30025**
- Sheil-Small, T. Applications of the Hadamard product. **82g:30042**
- Špak, G. S. Some estimates for functions that, at two points, have prescribed values and values of first derivatives. (Russian) **82i:30035**

secondary classifications:

- Baranova, V. A. (with Nguen Tu Than') Uniform approximation of functions by generalized polynomials in multiply connected domains. (Russian. English summary) (**82g:30064**)
- Nguen Tu Than' See Baranova, V. A., (**82g:30064**)
- Rawlins, A. D. The explicit Wiener-Hopf factorisation of a special matrix. (**82m:15018**)

30Dxx Entire and meromorphic functions, and related topics

secondary classifications:

- Bauer, Karl Wilhelm (with Ruscheweyh, Stephan) ★Differential operators for partial differential equations and function theoretic applications. (**82d:35012**)
- Ruscheweyh, Stephan See Bauer, Karl Wilhelm, (**82d:35012**)

30D05 Functional equations in the complex domain, iteration and composition of analytic functions [See also 34A20, 39-XX.]

- Aaronson, Jon A remark on the exactness of inner functions. **82c:30018**
- Baker, I. N. The iteration of polynomials and transcendental entire functions. **82g:30043**
- Bank, Steven B. On certain canonical products which cannot satisfy algebraic differential equations. **82g:30044**
- Bhattacharyya, P. On the existence of fixpoints. **82g:30045**
- Burckel, R. B. Iterating analytic self-maps of discs. **82g:30046**
- Cowen, Carl C. Iteration and the solution of functional equations for functions analytic in the unit disk. **82i:30036**
- Gross, Fred (with Koont, Sinan; Yang, Chung Chun) On right and left factors of a certain class of entire functions. **82a:30034**
- I'evskii, L. I. On solutions of a system of functional equations in a class of meromorphic functions. (Russian) **82g:30047**
- Koont, Sinan See Gross, Fred; et al., **82a:30034**
- Korobeinik, Ju. F. A functional equation. II. (Russian) **82d:30022**
- Mues, E. (with Steinmetz, Norbert) The theorem of Tumura-Clunie for meromorphic functions. **82b:30021**

- Pommerenke, Ch. On asymptotic iteration of analytic functions in the disk. **82g:30048**
On ergodic properties of inner functions. **82h:30019**
Shimomura, Shun Entire solutions of a polynomial difference equation. **82j:30029**
Steinmetz, Norbert See Mues, E., **82h:30021**
Suleimanov, N. M. Theorems of Wiman-Valiron type for solutions of inverse-parabolic equations. (Russian) **82c:30037**
Yang, Chung Chun See Gross, Fred; et al., **82a:30034**

secondary classifications:

- Bank, Steven B. (with Kaufman, Robert P.) On Briot-Bouquet differential equations and a question of Einar Hille. **(82g:34006)**
Braaksma, B. L. J. Laplace integrals in singular differential and difference equations. **(82f:34064)**
Ergin, N. P. The equations $w'' = f(w', w, z)$ with an irrational right hand side. (Russian) **(82m:34006)**
Gackstatter, Fritz (with Laine, Ilpo) Zur Theorie der gewöhnlichen Differentialgleichungen im Komplexen. **(82g:34007)**
Kaufman, Robert P. See Bank, Steven B., **(82g:34006)**
Laine, Ilpo See Gackstatter, Fritz, **(82g:34007)**
Mähler, Kurt On a special nonlinear functional equation. **(82m:10042)**
Petrenko, V. P. The growth of Q -pseudomorph solutions of difference equations. (Russian) **(82f:39003)**
Shih, Mou Hsiang (with Yeh, Cheh Chih) Successive approximations in complex analysis. **(82f:30040)**
Vogl, Fritz Über eine Integraldarstellung der ganzen Lösungen der Funktional-Differentialgleichungen $\sum_{k=0}^n a_k D^k y(\lambda^{n-k} z) = f(z)$. **(82h:34088)**
Yeh, Cheh Chih See Shih, Mou Hsiang, **(82f:30040)**

30D10 Representations of entire functions by series and integrals

- Bajpai, S. S. See Bajpai, Shyam K., **82h:30020**
Bajpai, Shyam K. (with Bajpai, S. S.) The lower type of entire functions represented by Dirichlet series. III. **82h:30020**
Bundschuh, Peter On entire functions of slow growth. **82a:30035**
Juneja, O. P. (with Nandan, Krishna; Kapoor, G. P.) On the (p, q) -type and lower (p, q) -type of an entire Dirichlet series. **82h:30021**
Kapoor, G. P. See Juneja, O. P.; et al., **82h:30021**
Megrebian, L. H. Parametric representations of certain classes of functions that are regular in the upper half-plane. (Russian) **82i:30037**
Nandan, Krishna See Juneja, O. P.; et al., **82h:30021**

secondary classifications:

- Dickson, D. G. Expansions of arbitrary analytic functions in series of exponentials. **(82g:30006)**
Korevaar, J. Zero distribution of entire functions and spanning radius for a set of complex exponentials. **(82j:30035)**
Shull, C. S. F. Mean interpolation of entire functions. **(82h:30041)**

30D15 Special classes of entire functions and growth estimates

- Awasthi, K. N. On the order and lower order of integral functions. **82j:30030**
Bajpai, Shyam K. The coefficients of power series giving a coefficients characterization for type. (Italian summary) **82j:30031**
Baker, I. N. Entire functions with two linearly distributed values. **82c:30038**
Barker, George Phillip See Singh, S. K., **82a:30036**
Blank, N. M. (with Ostrovskii, I. V.) On the growth of functions that are analytic in the disc and are connected by a linear relation. (Russian) **82h:30029**
Bruma, Joaquim Analytic Denjoy-Carleman algebras. (Spanish. English summary) **82d:30023**
Černý, N. M. Sufficient test for complete regularity of the growth of entire functions of exponential type with a polygonal conjugate diagram. (Russian) **82c:30039**
Child, James D. Periodic-type functionals and their extensions. **82j:30038**
Ephron, Mark S. A new characterization of entire functions of completely regular growth. **82g:30049**
Eremenko, A. E. The growth of entire and subharmonic functions on asymptotic curves. (Russian) **82i:30039**
Fainberg, E. D. On an estimate of an entire function indicator and an integral with respect to nonadditive measure. (Russian. Armenian summary) **82j:30032**
Fenton, P. C. The minimum of small entire functions. **82c:30040**
Fricke, Gerd H. (with Roy, Ranjan; Shah, Shantilal M.) Bounded index, entire solutions of ordinary differential equations and summability methods. **82i:30040**
Gervais, Robert (with Rubel, Lee A.) Yet another characterization of the sine function. **82h:30022**
Gol'dberg, A. A. (with Korenkov, M. E.) Asymptotic behavior of the logarithmic derivative of an entire function of completely regular growth. (Russian) **82c:30041**
(with Ostrovskii, I. V.) The growth of entire Hermitian-positive functions of finite order. (Russian. English summary) **82j:30033**
Gurarii, V. P. Harmonic analysis of functions that are bounded on the right semiaxis and growing on the left semiaxis. (Russian. English summary) **82j:30034**
Heifric, A. I. Analogue of the Valiron-Titchmarsh theorem for entire functions with roots on a logarithmic spiral. (Russian) **82h:30023**
Kamynin, I. P. Entire ridge functions with real zeros. (Russian) **82h:30024**
Kondratjuk, A. A. Asymptotic behavior and the number of deficient values of entire functions of completely regular growth. (Russian. English summary) **82i:30041**
Korenkov, M. E. See Gol'dberg, A. A., **82c:30041**
Korevaar, J. Zero distribution of entire functions and spanning radius for a set of complex exponentials. **82j:30035**
Krein, M. G. (with Nudel'man, A. A.) Representation of entire functions that are

positive on the real axis, or on the half axis, or outside a finite interval. (Russian) **82g:30050**

- Levin, B. Ja. (with Ostrovskii, I. V.) Small perturbations of the set of roots of sine-type functions. (Russian) **82h:30022**
Mustafin, R. M. Bound for an entire function in terms of bounds for the function and its derivatives on a curve. (Russian) **82g:30051a**
Bound for an entire function in terms of bounds for the function and its derivatives on a closed strip. (Russian) **82g:30051b**
Niinö, Kiyoshi (with Suita, Nobuyuki) Growth of a composite function of entire functions. **82h:30023**
Nudel'man, A. A. See Krein, M. G., **82g:30050**
Offner, Carl D. Zeros and growth of entire functions of order 1 and maximal type with an application to the random signs problem. **82f:30026**
Ostrovskii, I. V. See Levin, B. Ja., **82h:30022**; Gol'dberg, A. A., **82j:30033** and Blank, N. M., **82h:30029**
Perelli, A. (with Zannier, U.) On a theorem of Pólya. (Italian. English summary) **82i:30042**
Rafaeljan, S. G. A class of entire functions of finite growth. (Russian. Armenian summary) **82c:30042**
Roy, Ranjan See Fricke, Gerd H.; et al., **82i:30040**
Rubel, Lee A. See Gervais, Robert, **82h:30022**
Szűcsinszka, E. F. On the Borel inequality for finite-order entire functions. (Russian) **82d:30024**
Shah, Shantilal M. See Fricke, Gerd H.; et al., **82i:30040**
Shea, Daniel F. (with Wainger, Stephen) Growth problems for a class of entire functions via singular integral estimates. **82c:30043**
Singh, S. K. (with Barker, George Phillip) Slowly changing functions and their applications. **82a:30036**
Srivastava, G. S. On the proximate order and proximate type of a subharmonic function. **82h:30025**
Suita, Nobuyuki See Niinö, Kiyoshi, **82h:30023**
Tacik, R. M. On the order of growth of a characteristic series. (Russian) **82j:30036**
Vaish, Satendra Kumar On the logarithmic proximate orders. **82c:30030**
Vitushkin, A. G. Approximation of entire functions and signal coding with finite spectrum. (Russian) **82h:30024**
Wainger, Stephen See Shea, Daniel F., **82c:30043**
Zannier, U. See Perelli, A., **82i:30042**

secondary classifications:

- Agranovič, P. Z. (with Ronkin, L. I.) Functions of completely regular growth of several variables. (Russian) **(82h:32009)**
Awasthi, K. N. (with Dixit, K. K.) On the logarithmic H -proximate order of analytic functions represented by Dirichlet series. **(82h:30002)**
Bogda, Richard A. (with Shankar, Hari) Convolutions and growth numbers of analytic functions. **(82a:30002)**
Dixit, K. K. See Awasthi, K. N., **(82h:30002)**
Gervais, Robert (with Rahman, Q. I.; Schmeisser, G.) Approximation by $(0, 2)$ -interpolating entire functions of exponential type. **(82j:30050)**
Giltmutdinova, A. Ja. Theorems of A. Ostrowski's type and invariant subspaces of analytic functions. (Russian) **(82k:30056)**
Gruman, Lawrence Propriétés arithmétiques des fonctions entières. (English summary) **(82g:10072)**
Juneja, O. P. (with Nandan, Krishna) On the growth of analytic functions represented by Dirichlet series. **(82i:30003)**
Kapoor, G. P. On the coefficients of analytic functions in the unit disc having nonzero finite order. (Italian summary) **(82m:30007)**
Ljubiškin, V. A. See Sadovnicii, V. A., **(82c:30006)**
Mäkelä, Jürgen Das Wachstumsverhalten ganzer Funktionen unter Voraussetzungen über ihre Laplace-Transformierte. **(82d:44001)**
Mohon'ko, A. Z. Estimates of the growth of branches of algebroid functions and their Nevanlinna characteristics. (Russian) **(82j:30041a)**
Estimates of the growth of branches of algebroid functions and their Nevanlinna characteristics. II. Applications. (Russian) **(82j:30041b)**
Nandan, Krishna See Juneja, O. P., **(82i:30003)**
Pittbauer, F. (with Wyrwich, Herbert) Ganze Funktionen mit gebrochenen asymptotischen Potenzreihen-Entwicklungen. (English and Serbo-Croatian summaries) **(82c:30060)**
Rahman, Q. I. See Gervais, Robert; et al., **(82j:30050)**
Ronkin, L. I. See Agranovič, P. Z., **(82h:32009)**
Sadovnicii, V. A. (with Ljubiškin, V. A.) Regularized sums of the roots of a class of entire functions of exponential type. (Russian) **(82c:30006)**
Salmassi, Mohammad (with Shah, Shantilal M.) Functions with univalent derivatives and of irregular growth. **(82i:30019)**
Schmeisser, G. See Gervais, Robert; et al., **(82j:30050)**
Shah, Shantilal M. See Salmassi, Mohammad, **(82i:30019)**
Shankar, Hari See Bogda, Richard A., **(82a:30002)**
Srivastava, G. S. See Vaish, Satendra Kumar, **(82b:31008)**
Vaish, Satendra Kumar (with Srivastava, G. S.) On the mean values of an entire function and its derivatives. **(82h:31008)**
On the mean values of an entire Dirichlet series of order zero. **(82h:30004)**
A theorem on the means of an entire Dirichlet series of order zero. **(82j:30002)**
Wyrwich, Herbert See Pittbauer, F., **(82c:30060)**

30D20 Entire functions, general theory

- Abi-Khuzam, Faruk F. The order of entire functions with radially distributed zeros. **82i:30043**
Argirova, T. Entire functions bounded at the lattice points. **82j:30037**
Diamond, Harold G. (with Pomerance, Carl; Rubel, Lee A.) Sets on which an entire

function is determined by its range. **82c:30031**

Gundersen, Gary G. When two entire functions and also their first derivatives have the same zeros. **82b:30025**

Hayman, Walter Kurt An approximation theorem with applications to Iversen's theorem. **82g:30052**

Pomerance, Carl See Diamond, Harold G.; et al., **82c:30031**

Rubel, Lee A. See Diamond, Harold G.; et al., **82c:30031**

Srivastava, G. S. On the zeros of successive derivatives of an entire function. **82m:30028**

Zhang, Guang Hou On entire functions extremal for Denjoy's conjecture. **82k:30030**

secondary classifications:

Awasthi, K. N. On the order and lower order of integral functions. **(82j:30030)**

Bank, Steven B. (with Laine, Ilpo) On the oscillation theory of $f'' + Af = 0$ where A is entire. **(82m:34005)**

B'rzakov, D. G. (with Raičinov, I.) Solvability of an integro-differential equation in some classes of entire functions. (Bulgarian. Russian and English summaries) **(82b:45016)**

Chen, Kuang Ho (with Yang, Chung Chun) On n -dimensional sampling theorems. **(82c:94013)**

Ganapathy Iyer, V. A note on the space of integral functions. **(82b:46039)**

Gupta, S. C. See Vaish, Satendra Kumar, **(82b:30004)**

Laine, Ilpo See Bank, Steven B., **(82m:34005)**

Mohon'ko, A. Z. Application of a result of Clunie and Hayman to first-order differential equations. (Russian) **(82k:34007)**

Niinö, Kiyoshi (with Suita, Nobuyuki) Growth of a composite function of entire functions. **(82b:30023)**

Raičinov, I. See B'rzakov, D. G., **(82b:45016)**

Steinmetz, Norbert Über das Anwachsen der Lösungen homogener algebraischer Differentialgleichungen zweiter Ordnung. (English summary) **(82d:34010)**

Suita, Nobuyuki See Niinö, Kiyoshi, **(82b:30023)**

Topplia, Sakari On the length of asymptotic paths of entire functions of order zero. **(82a:30040)**

Ueda, Hideharu Unicity theorems for entire functions. **(82a:30041)**

Vaish, Satendra Kumar (with Gupta, S. C.) Logarithmic mean of an entire Dirichlet series. **(82b:30004)**

Yang, Chung Chun See Chen, Kuang Ho, **(82c:94013)**

30D30 Meromorphic functions, general theory

Barsegian, G. A. Geometry of meromorphic functions. (Russian) **82i:30044**

Džrbasjan, Mk. M. (with Zaharjan, V. S.) On the coefficients of expansion of meromorphic functions in generalized Maclaurin series. (Russian) **82c:30044**

Ėiderman, V. Ja. A uniqueness theorem for meromorphic functions. (Russian. Armenian and English summaries) **82i:30045**

Ferentinou-Nikolopoulou, Ioanna Sur quelques relations entre les zéros et les pôles des fonctions méromorphes. Applications au développement de Mittag-Leffler. **82b:30026**

Grigorjan, L. D. On the order of growth for the norm of the holomorphic component of a meromorphic function. **82b:30026**

Kondratjuk, A. A. The Fourier series method for entire and meromorphic functions of completely regular growth. II. (Russian) **82b:30027**

Matevosjan, G. U. The factorization of meromorphic functions with separation of their singularity set. (Russian. Armenian and English summaries) **82b:30028**

Ozawa, Mitsuru On uniquely factorizable meromorphic functions. **82b:30029**

Steinmetz, Norbert Über die Nullstellen von Differentialpolynomen. **82g:30053**

Yoshida, Hidenobu Asymptotic values of meromorphic functions of smooth growth. **82b:30027**

Zaharjan, V. S. See Džrbasjan, Mk. M., **82c:30044**

secondary classifications:

Agarwal, S. K. See Mal, Dingur, **(82j:30075)**

Coffman, C. V. (with Duffin, Richard J.) On the structure of biharmonic functions satisfying the clamped plate conditions on a right angle. **(82c:31004)**

Duffin, Richard J. See Coffman, C. V., **(82c:31004)**

Heath, L. F. A weighted Nevanlinna characteristic of meromorphic functions in the plane. **(82i:30046)**

Krein, M. G. (with Langer, Heinz) Some propositions on analytic matrix functions related to the theory of operators in the space Π_+ . **(82d:47053)**

Langer, Heinz See Krein, M. G., **(82d:47053)**

Lutz, Donald A. Connection problems in the parameterless case: progress and more problems. **(82d:34071)**

Mal, Dingur (with Agarwal, S. K.) Space of a class of meromorphic functions. **(82j:30075)**

Perelli, A. (with Zannier, U.) On a theorem of Pólya. (Italian. English summary) **(82i:30042)**

Petrenko, V. P. Regularity of growth of algebroid solutions of algebraic differential equations. (Russian) **(82c:34008)**

Sarmant-Durix, Marie-Claude Décomposition en produit de facteurs de fonctions méromorphes. (English summary) **(82b:12017)**

Strelitz, Shlomo On meromorphic solutions of algebraic differential equations. **(82a:34006)**

Thijse, G. Philip A. On the (sub)logarithmic property of the pole-, zero- and algebraic multiplicity of operator functions. **(82d:47026)**

Todorov, Pavel G. Explicit formulas for the coefficients of Faber polynomials with respect to univalent functions of the class Σ . **(82f:30016)**

Yamashita, Shinji The meromorphic Hardy class is the Nevanlinna class. **(82f:30027)**

Yanagihara, Niro Meromorphic solutions of some difference equations. **(82m:39006a)**

Meromorphic solutions of some difference equations. II. **(82m:39006b)**

Zannier, U. See Perelli, A., **(82i:30042)**

30D35 Distribution of values, Nevanlinna theory

Bank, Steven B. Some results on hypertranscendental meromorphic functions. **82b:30030**

Barker, George Phillip (with Singh, Anand P.) On differential polynomials. **82j:30038**

Bhattacharyya, P. An extension of a theorem of Baker. **82b:30031**

Bhoosnurmath, Subhas S. See Gopalakrishna, H. S., **82b:30029**

Bridges, Douglas S. On Montel's proof of the great Picard theorem. **82c:30032**

Crubiak, Thomas P. (with Gundersen, Gary G.) Entire functions that share real zeros and real ones. **82b:30028**

Eremenko, A. E. The growth of the Nevanlinna proximity function. (Russian) **82a:30037**

Gackstatter, Fritz (with Meyer, Gottfried P.) Zur Wertverteilung der Quotienten von Exponentialpolynomen. **82g:30054**

Gol'dberg, A. A. The growth of functions, meromorphic in the disc, with restrictions on the logarithmic derivative. (Russian) **82c:30045**

Gopalakrishna, H. S. (with Bhoosnurmath, Subhas S.) Exceptional values of differential polynomials. **82b:30029**

Gundersen, Gary G. See Crubiak, Thomas P., **82b:30028**

Hayman, Walter Kurt On a meromorphic function having few poles but not tending to infinity along a path. **82j:30039**

Heath, L. F. A weighted Nevanlinna characteristic of meromorphic functions in the plane. **82i:30046**

Heilper, Andrei The zeros of functions in Nevanlinna's area class. **82c:30046**

Hennekemper, Wilhelm Über die Wertverteilung von $(f^{k+1})^{(k)}$. **82k:30031**

Klič, Alois Some remarks on the Nevanlinna theory of holomorphic mappings of Riemann surfaces. (Czech summary) **82a:30038**

L'vova, S. V. Letter to the editors: "Valiron defects of meromorphic functions and of holomorphic curves over a half plane" [Teor. Funkcii Funkcional. Anal. i Prilozhen. No. 32 (1979), 48–53; MR 80m:30035]. (Russian) **82j:30040**

Meyer, Gottfried P. See Gackstatter, Fritz, **82g:30054**

Mohon'ko, A. Z. Estimates of the growth of branches of algebroid functions and their Nevanlinna characteristics. (Russian) **82j:30041a**

A field of algebroid functions and estimates of their Nevanlinna characteristics. (Russian) **82m:30029**

Estimates of the growth of branches of algebroid functions and their Nevanlinna characteristics. II. Applications. (Russian) **82j:30041b**

Mitš, Hideo The value distribution of meromorphic functions in an angular domain. II. **82i:30047**

Petrenko, V. P. Growth and distribution of values of algebroid functions. (Russian) **82b:30032**

Asymptotic properties of meromorphic functions and entire curves. (Russian) **82i:30048**

On the growth and distribution of values of minimal surfaces. (Russian) **82i:30049**

Proskurnja, I. P. On a theorem of Hayman and Fuchs. (Russian) **82d:30025**

Some generalizations of R. Nevanlinna characteristics and their properties. (Russian) **82c:30047**

Some generalizations of R. Nevanlinna's characteristics and their properties for meromorphic functions of infinite lower order. (Russian) **82c:30033**

Sato, Tsuneo Remarks on the deficiencies of algebroid functions of finite order. **82c:30034**

Singh, Anand P. See Barker, George Phillip, **82j:30038**

Sodin, M. L. The correlation between sets of defect values and deviations for a meromorphic function of finite order. (Russian) **82i:30050**

Steinmetz, Norbert Zur Wertverteilung der Quotienten von Exponentialpolynomen. **82c:30035**

Sung, Chen Han Defect relations of holomorphic curves and their associated curves in C^p . **82a:30039**

On the deficiencies of holomorphic curves in complex projective space. **82k:30032**

Topplia, Sakari On the length of asymptotic paths of entire functions of order zero. **82a:30040**

On exceptional values of functions meromorphic outside a linear set. **82c:30036**

Picard sets for meromorphic functions with a deficient value. **82b:30030**

Ueda, Hideharu Unicity theorems for entire functions. **82a:30041**

Unicity theorems for meromorphic or entire functions. **82c:30048**

Yamashita, Shinji The meromorphic Hardy class is the Nevanlinna class. **82f:30027**

Zabolockii, N. V. Some relations for Nevanlinna characteristics of a meromorphic function of zero kind. (Russian) **82m:30030**

Zhuang, Qi Tai On the distribution of the values of meromorphic functions. **82g:30055**

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Abi-Khuzam, Faruk F. The order of entire functions with radially distributed zeros. **(82i:30043)**

Baker, I. N. Entire functions with two linearly distributed values. **(82c:30038)**

Barsegian, G. A. Geometry of meromorphic functions. (Russian) **(82i:30044)**

Blank, N. M. (with Ostrov'skii, I. V.) On the growth of functions that are analytic in the disc and are connected by a linear relation. (Russian) **(82k:30029)**

Drouilhet, S. J. A unicity theorem for meromorphic mappings between algebraic varieties. **(82m:32021)**

Gol'dberg, A. A. (with Koren'kov, M. E.) Asymptotic behavior of the logarithmic derivative of an entire function of completely regular growth. (Russian) **(82c:30041)**

Kondratjuk, A. A. Asymptotic behavior and the number of deficient values of entire functions of completely regular growth. (Russian. English summary) **(82i:30041)**

Koren'kov, M. E. See Gol'dberg, A. A., **(82c:30041)**

Mues, E. (with Steinmetz, Norbert) The theorem of Tumura-Clunie for meromorphic functions. **(82b:30021)**

Müller, Gerhard Otto (with Trautner, Rolf) Fatou-Riesz theorems in general sequence spaces. **(82c:40006)**

Murai, Takafumi The value-distribution of lacunary series and a conjecture of Paley. (French summary) **(82k:30002)**

Ostrov'skii, I. V. See Blank, N. M., **(82k:30029)**

- Paljutkin, V. G. On zeros of functions represented by series of simple fractions. (Russian) **82b:30008**
- Petrenko, V. P. On the growth of meromorphic solutions of algebraic differential equations. (Russian) **(82b:34006)**
- Rosenblum, Marvin (with Rovnyak, James) An operator-theoretic approach to theorems of the Pick-Nevanlinna and Loewner types. I. **(82a:47016)**
- Rovnyak, James See Rosenblum, Marvin, **(82a:47016)**
- Shea, Daniel F. (with Wainger, Stephen) Growth problems for a class of entire functions via singular integral estimates. **(82c:30043)**
- Steinmetz, Norbert See Mues, E., **(82b:30021)**
- Trautner, Rolf See Müller, Gerhard Otto, **(82c:40006)**
- Wainger, Stephen See Shea, Daniel F., **(82c:30043)**
- Yang, Chung Chun On nonreal complex roots of a certain class of entire functions. **(82j:30010)**
- Yoshida, Hidenobu Asymptotic values of meromorphic functions of smooth growth. **(82b:30027)**

30D40 Cluster sets, prime ends, boundary behavior

- Airapetjan, A. N. On a generalization of Fatou's theorem. (Russian. Armenian summary) **82b:30033**
- Bezpal'cev, O. A. Generalized analytic continuation by symmetry. (Russian) **82c:30049**
- Divariseivili, I. A. Some conditions for the existence of angular boundary values of analytic functions. (Russian. Georgian and English summaries) **82c:30037**
- Gamelin, T. W. (with Niimura, Mikio) Cluster values of analytic functions along paths. **82c:30050**
- Gavrilov, V. I. (with Kanatnikov, A. N.; Pighetti, Cécile) Ensembles d'accumulation généralisés. (English summary) **82c:30051**
- Hwang, Jun Shung On a problem of Doob about the fine topology and normal functions. **82b:30026**
- On a problem of Lohwater about the asymptotic behaviour in Nevanlinna's class. **82b:30031**
- Baire category principle and uniqueness theorem. **82j:30042**
- Ivanov, O. V. Some conformally invariant bicompact extensions. (Russian) **82d:30027**
- Kanatnikov, A. N. Limiting sets along sequences of compacts. (Russian) **82g:30056**
- See also Gavrilov, V. I.; et al., **82c:30051**
- Kolesnikov, S. V. Special boundary points of analytic functions. (Russian) **82c:30038**
- Kufarev, B. P. On the boundary behavior of plane \mathcal{C}_p^1 -mappings. (Russian) **82c:30052**
- Mikkelsen, Ruth L. Totally and partially ambiguous points of planar functions. **82b:30033**
- Niimura, Mikio Asymptotic point sets of analytic mappings. **82f:30028**
- Cluster sets in the large of meromorphic functions on Riemann surfaces. **82b:30032**
- Boundary behavior of meromorphic functions along Green's lines. **82k:30034**
- See also Gamelin, T. W., **82c:30050**
- Pighetti, Cécile See Gavrilov, V. I.; et al., **82c:30051**
- Šahverdjian, A. Ju. On A. L. Šaginjan's theorems on limit decrease of meromorphic functions. (Russian. Armenian summary) **82c:30039**
- Satyanarayana, Upadhyayula V. (with Weiss, Max L.) Restricted principal values of bounded analytic and harmonic functions. **82g:30057**
- Schneider, Walter J. Approximation and harmonic measure. **82g:30058**
- Širokov, N. A. On the modulus of boundary values of analytic functions of class Λ_α^* . (Russian. English summary) **82j:30043**
- Weiss, Max L. See Satyanarayana, Upadhyayula V., **82g:30057**

secondary classifications:

- Barth, Karl F. (with Clunie, James G.) Level curves of functions of bounded characteristic. **(82g:30059)**
- Clunie, James G. See Barth, Karl F., **(82g:30059)**
- Divariseivili, I. A. The relation between boundary values and the behavior of analytic functions near the boundary. (Russian) **(82f:30031)**
- Foran, J. (with Humke, P. D.) Some set-theoretic properties of σ -porous sets. **(82c:26005)**
- Humke, P. D. See Foran, J., **(82c:26005)**
- Minda, Carl David (with Näkki, Raimo) Invariant metrics on Riemann surfaces. **(82k:30049)**
- Näkki, Raimo See Minda, Carl David, **(82k:30049)**
- Osada, Masayuki Harmonic metric and Koebe's theorem. **(82b:30054)**
- Pommerenke, Ch. Boundary behaviour of conformal mappings. **(82i:30008)**
- Ruszkii, L. V. Prime ends of Riemann surfaces, connected with boundary elements of the second kind. (Russian) **(82k:30045)**
- Tetvadze, G. E. Boundary value properties of Blaschke-type products in the unit circle. (Russian. Georgian and English summaries) **(82k:30036)**
- Vuorinen, Matti Cluster sets and boundary behavior of quasiregular mappings. **(82a:30030)**
- On the boundary behavior of locally K -quasiconformal mappings in space. **(82c:30032)**
- Wimp, Jet On uniqueness sets for expansions in sequences of functions arising from singular generating functions. **(82m:30008)**
- Yamashita, Shinji Bi-Fatou points of a Blaschke quotient. **(82b:30034)**

30D45 Normal functions, normal families

- Arumari, Y. Eben See Bhattacharyya, P., **82b:30034**
- Bhattacharyya, P. (with Arumari, Y. Eben) On the structure of the Fatou set for the polynomial $z^2 + pz$, $p < -3$. **82b:30034**
- Campbell, Douglas M. (with Piranian, George) Normal analytic functions and a question of M. L. Cartwright. **82c:30053**
- Lappan, Peter On the normality of derivatives of functions. II. **82m:30031**

- Levina, G. D. Meromorphic functions normal and hypernormal with respect to subgroups of conformal automorphisms of the unit disc. (Russian) **82f:30029**
- Piranian, George See Campbell, Douglas M., **82c:30053**
- Yamashita, Shinji The order of normality and meromorphic univalent functions. **82j:30044**

secondary classifications:

- Aulaskari, Rauno On F_σ -normality and additive automorphic functions of the first kind. **(82c:30065)**
- Baker, I. N. The iteration of polynomials and transcendental entire functions. **(82g:30043)**
- Berberian, S. L. Boundary properties of subharmonic functions that generate normal families on subgroups of automorphisms of the unit disc. (Russian. Armenian and English summaries) **(82c:31003)**
- Jakobson, M. V. Markov partitions for rational endomorphisms of the Riemann sphere. **(82c:58049)**
- Vuorinen, Matti On the boundary behavior of locally K -quasiconformal mappings in space. **(82c:30032)**
- Yamashita, Shinji A nonnormal function whose derivative is of Hardy class H^p , $0 < p < 1$. **(82a:30046)**

30D50 Blaschke products, bounded characteristic, bounded functions, functions with positive real part

- Avetisjan, R. A. On the representation of analytic functions in the disc as infinite products of Blaschke type. (Russian. Armenian summary) **82d:30028**
- Barth, Karl F. (with Clunie, James G.) Level curves of functions of bounded characteristic. **82g:30059**
- Clunie, James G. See Barth, Karl F., **82g:30059**
- Džirbašjan, A. M. (with Mikaeljan, G. V.) Construction and basic properties of a family of Blaschke-type functions for a half plane. (Russian. Armenian and English summaries) **82f:30030**
- Factorization of analytic functions of any finite order in a half-plane. (Russian) **82c:30040**
- Fisher, S. D. (with Micchelli, Charles A.) The n -width of sets of analytic functions. **82b:30035**
- Fricke, Gerd H. A characterization of functions of bounded index having positive zeros. **82c:30054**
- Gamelin, T. W. Wolff's proof of the corona theorem. **82a:30042**
- Goluzina, E. G. On the ranges of values of certain systems of functionals in classes of functions with positive real part. (Russian) **82b:30036**
- Holland, F. (with Twomey, J. B.) Integral means of functions with positive real part. **82b:30037**
- Hwang, Jun Shung The growth of minimum modulus of Blaschke products. **82b:30033**
- Jevtic, M. Sur la dérivée de la fonction atomique. (English summary) **82c:30055**
- Jones, Peter W. Ratios of interpolating Blaschke products. **82m:30032**
- Koosis, Paul Entire functions of exponential type as multipliers for weight functions. **82m:30033**
- Matyska, Jiří An example of removable singularities for bounded holomorphic functions. (Czech summary) **82k:30035**
- Metzger, Thomas A. On BMOA for Riemann surfaces. **82m:30034**
- Micchelli, Charles A. See Fisher, S. D., **82b:30035**
- Mikaeljan, G. V. See Džirbašjan, A. M., **82f:30030**
- Minda, Carl David The image of the Ahlfors function. **82m:30035**
- Nestoridis, V. Inner functions: noninvariant connected components. **82b:30038**
- Shapiro, Joel H. Cauchy transforms and Beurling-Carleson-Hayman thin sets. **82b:30039**
- Stegenga, David A. (with Stephenson, Kenneth) A geometric characterization of analytic functions with bounded mean oscillation. **82m:30036**
- Stephenson, Kenneth See Stegenga, David A., **82m:30036**
- Tetvadze, G. E. Boundary value properties of Blaschke-type products in the unit circle. (Russian. Georgian and English summaries) **82k:30036**
- Twomey, J. B. See Holland, F., **82b:30037**
- Verbickii, I. É. Inner functions as multipliers of l_p^2 spaces. (Russian) **82j:30045**
- Yamashita, Shinji Cowling's theorem on a Dirichlet finite holomorphic function in the disk. **82a:30043**
- Bi-Fatou points of a Blaschke quotient. **82b:30034**

secondary classifications:

- Clunie, James G. Some remarks on extreme points in function theory. **(82g:30024)**
- Džirbašjan, A. M. Factorization of certain general classes of functions meromorphic in a half plane. (Russian) **(82k:30040)**
- Hwang, Jun Shung On a problem of Doob about the fine topology and normal functions. **(82d:30026)**
- Baire category principle and uniqueness theorem. **(82j:30042)**
- Nikol'skii, N. K. Bases of exponentials and values of reproducing kernels. (Russian) **(82c:30007)**
- Reade, Maxwell O. See Umezawa, Toshio, **(82k:30019)**
- Šahverdjian, A. Ju. On A. L. Šaginjan's theorems on limit decrease of meromorphic functions. (Russian. Armenian summary) **(82c:30039)**
- Sledd, W. T. Random series which are BMO or Bloch. **(82k:30004)**
- Stray, Arne Two applications of the Schur-Nevanlinna algorithm. **(82g:30062)**
- Tolokonnikov, V. A. Estimates in Carleson's corona theorem and finitely generated ideals of the algebra H^∞ . (Russian) **(82a:46058)**
- Umezawa, Toshio (with Reade, Maxwell O.) Functions whose derivative has a positive real part. **(82k:30019)**
- Yamashita, Shinji On hyperbolic Hardy classes. **(82b:30036)**
- Young, N. J. A maximum principle for interpolation in H^∞ . **(82i:46083)**

30D55 H^p -classes

- Airapetjan, G. M. Representation of certain subclasses of Hardy's class H^1 by means of systems of rational fractions. (Russian. Armenian and English summaries) **82c:30056**
- Bose, S. K. See Mal, Dingur, **82a:30044**
- Brown, Johnny E. Derivatives of close-to-convex functions, integral means and bounded mean oscillation. **82j:30046**
- Casazza, P. G. (with Pengra, R. W.; Sundberg, Carl) Complemented ideals in the disk algebra. **82d:30029**
- Džvarševili, I. A. The relation between boundary values and the behavior of analytic functions near the boundary. (Russian) **82f:30031**
- Eienigenburg, P. J. The integral means of analytic functions. **82k:30037**
- Holland, F. (with Twomey, J. B.) Conditions for membership of Hardy spaces. **82h:30035**
- Jevtić, M. Singular inner functions with derivative in $A^{p,\alpha}$. (Serbo-Croatian. English summary) **82d:30030**
- The Taylor coefficients of elements of the space D^p . (Russian) **82m:30037**
- Jones, Peter W. Estimates for the corona problem. **82i:30051**
- von Keviczky, Attila Bela Radiale Darstellbarkeit im Dualraum von $H^p(\Pi_+)$. **82i:30053**
- Mal, Dingur (with Bose, S. K.) Multipliers and homeomorphisms on spaces of meromorphic functions. **82a:30044**
- Matešević, M. The isoperimetric inequality in the Hardy class H^1 . **82i:30052**
- Nikol'skii, N. K. What problems do spectral theory and complex analysis solve for each other? **82a:30045**
- Pengra, R. W. See Casazza, P. G.; et al., **82d:30029**
- Power, S. C. Vanishing Carleson measures. **82c:30057**
- Savoyant, Michel Limites de suites bornées de polynômes. **82c:30041**
- Schempp, Walter Wiener-Hopf techniques in approximating holomorphic functions. **82g:30060**
- Sundberg, Carl See Casazza, P. G.; et al., **82d:30029**
- Twomey, J. B. See Holland, F., **82h:30035**
- Yamashita, Shinji A nonnormal function whose derivative is of Hardy class H^p , $0 < p < 1$. **82a:30046**
- On hyperbolic Hardy classes. **82h:30036**
- Dirichlet-finite outer functions. **82j:30047**

secondary classifications:

- Barakat, M. F. A. On linear functionals in the space H_p , $p < 1$. (Arabic summary) **(82m:46024)**
- Berkson, Earl One-parameter semigroups of isometries into H^p . **(82c:47051)**
- Composition operators isolated in the uniform operator topology. **(82f:47039)**
- Brennan, James E. Point evaluations, approximation in the mean and analytic continuation. **(82d:30006)**
- Caljuk, I. M. Some extremal problems for Hardy classes of vector-valued functions. (Russian) **(82f:46026)**
- Cohn, William S. Weighted kernel functions and conformal mappings. **(82j:30015)**
- Deeb, Waleed M. Decomposition of measures orthogonal to $H^\infty(D)$. (Arabic summary) **(82d:46075)**
- Džvarševili, I. A. Some conditions for the existence of angular boundary values of analytic functions. (Russian. Georgian and English summaries) **(82c:30037)**
- Gamelin, T. W. Wolff's proof of the corona theorem. **(82a:30042)**
- García-Cuerva, José Weighted H^p spaces. **(82a:42018)**
- Holland, F. (with Twomey, J. B.) Integral means of functions with positive real part. **(82h:30037)**
- Kabaila, V. Weighted interpolation in Hardy spaces. (Russian. Lithuanian and English summaries) **(82c:30044)**
- von Keviczky, Attila Bela Eine radiale Charakterisierung von $H^p(\Pi_+)$. **(82m:46025)**
- Nakazi, Takahiko (with Takahashi, Katsutoshi) Prediction n units of time ahead. **(82b:60041)**
- Peller, V. V. Hankel operators of class \mathcal{S}_p and their applications (rational approximation, Gaussian processes, the problem of majorization of operators). (Russian) **(82g:47022)**
- Storoženko, Ė. A. Approximation of functions of class H^p , $0 < p \leq 1$. (Russian) **(82b:30046)**
- Suciu, Ion (with Valuşescu, Ilie) Fatou and Szegő theorems for operator-valued functions. **(82b:47017)**
- Takahashi, Katsutoshi See Nakazi, Takahiko, **(82b:60041)**
- Twomey, J. B. See Holland, F., **(82h:30037)**
- Valuşescu, Ilie On the maximal outer function of a semispectral measure. **(82b:47050)**
- See also Suciu, Ion, **(82b:47017)**

30D60 Quasianalytic and other classes of functions

secondary classifications:

- Bruna, Joaquim Boundary interpolation sets for holomorphic functions smooth to the boundary and BMO. **(82h:30037)**
- Jevtić, M. The Taylor coefficients of elements of the space D^p . (Russian) **(82m:30037)**
- Musaev, K. M. Approximation in the mean of generalized analytic functions. (Russian. Azerbaijani and English summaries) **(82c:30070)**
- 30D99 None of the above, but in this section
- Bagijan, R. A. On the coincidence of two systems of functions associated with functions of Mittag-Leffler type. (Russian. Armenian summary) **82i:30054**
- Myslivec, S. G. Sets of values of a differential operator of infinite order with constant coefficients in spaces of holomorphic functions. (Russian) **82j:30048**
- Vagariakjan, A. A. On the uniqueness of analytic functions, increasing near the boundary. (Russian. Armenian and English summaries) **82g:30061**

30EXX Miscellaneous topics of analysis in the complex domain

30E05 Moment problems, interpolation problems

- Andrianov, V. L. On the question of the reconstruction of an entire function from its values at the points (λ_n) and $(\pm \lambda_n)$. (Russian) **82a:30047**
- Bao, Xue Song See Xu, Li Zhi; et al., **82g:30063**
- Berman, D. L. On the theory of interpolation in a complex domain. (Russian. Armenian and English summaries) **82c:30042**
- Bruna, Joaquim Boundary interpolation sets for holomorphic functions smooth to the boundary and BMO. **82h:30037**
- Cavaretta, A. S., Jr. (with Sharma, Ambikeshwar; Varga, R. S.) Interpolation in the roots of unity: an extension of a theorem of J. L. Walsh. **82j:30049**
- Chui, Charles K. (with Smith, Philip W.; Ward, Joseph D.) Approximation by M -ideals in the disc algebra. **82f:30032**
- Dyn'kin, E. M. Free interpolation sets for Hölder classes. (Russian) **82c:30043**
- German, S. P. Integral representation of an interpolation polynomial in domains without external zero-angles. (Russian) **82h:30038**
- Gervais, Robert (with Rahman, Q. I.; Schmeisser, G.) Approximation by $(0,2)$ -interpolating entire functions of exponential type. **82j:30050**
- Juneja, O. P. (with Rizvi, S. R. H.) Interpolation and approximation of entire functions. **82c:30058**
- Kabaila, V. Weighted interpolation in Hardy spaces. (Russian. Lithuanian and English summaries) **82c:30044**
- Klunnik, O. O. See Makarov, V. L.; et al., **82d:30031**
- Kopistira, M. P. See Makarov, V. L.; et al., **82d:30031**
- Kozłowski, Andrzej Analytic structure of the function of special interpolation. I. (Polish summary) **82m:30038a**
- Analytic structure of the function of special interpolation. II. (Polish summary) **82m:30038b**
- Analytic structure of the function of special interpolation. III. (Polish summary) **82m:30038c**
- Makarov, V. L. (with Klunnik, O. O.; Kopistira, M. P.) Some questions of interpolation of x^α -analytic functions. (Russian) **82c:30031**
- Nguyen Thuong Uen Interpolation with multiple nodes in a half plane in the class of analytic functions of finite order and normal type. (Russian) **82c:30045**
- Nudel'man, A. A. A generalization of classical interpolation problems. (Russian) **82f:30033**
- Rahman, Q. I. See Gervais, Robert; et al., **82j:30050**
- Rizvi, S. R. H. See Juneja, O. P., **82c:30058**
- Schempp, Walter On cardinal spline interpolants. **82c:30046**
- Schmeisser, G. See Gervais, Robert; et al., **82j:30050**
- Sharma, Ambikeshwar See Cavaretta, A. S., Jr.; et al., **82j:30049**
- Smith, Philip W. See Chui, Charles K.; et al., **82f:30032**
- Stray, Arne Two applications of the Schur-Nevanlinna algorithm. **82g:30062**
- Varga, R. S. See Cavaretta, A. S., Jr.; et al., **82j:30049**
- Vasjunin, V. I. Circular projections of sets that occur in the theory of interpolation. (Russian. English summary) **82b:30040**
- Ward, Joseph D. See Chui, Charles K.; et al., **82f:30032**
- Xu, Li Zhi (with Yang, Jia Xin; Bao, Xue Song) A class of generalized complex Newton interpolation series. (Chinese. English summary) **82g:30063**
- Yang, Jia Xin See Xu, Li Zhi; et al., **82g:30063**

secondary classifications:

- Amar-Sarroste, Denise Étude de suites d'interpolation dans le polydisque. (English summary) **(82b:32007)**
- Auberson, G. (with Mennessier, G.) On the computation of bounds for low energy Compton scattering parameters: proof of a conjecture. **(82e:81052)**
- Ball, Joseph A. Interpolation problems and Toeplitz operators on multiply connected domains. **(82d:47036)**
- Chen, Han Lin Complex spline functions. **(82h:41013)**
- Gorbaičuk, V. I. Reconstruction of analytic functions by the method of point interpolation. (Russian) **(82g:30003)**
- Gorin, E. A. See Vinogradov, S. A.; et al., **(82k:46039)**
- Hruščev, S. V. See Vinogradov, S. A.; et al., **(82k:46039)**
- Iľmuškin, G. M. Solutions of an operator power problem of moments. (Russian) **(82d:47031)**
- Janik, Adam On approximation and interpolation of entire functions. **(82g:30065)**
- Jones, Peter W. Ratios of interpolating Blaschke products. **(82m:30032)**
- Karenin, L. Ja. Interpolation on the unit circle. (Russian) **(82c:41006)**
- Korobčinskii, Ju. F. Interpolation problems, nontrivial expansions of zero and representative systems. (Russian) **(82b:30002)**
- Kotočigov, A. M. See Vinogradov, S. A., **(82k:46040)**
- Mennessier, G. See Auberson, G., **(82e:81052)**
- Nersisjan, A. A. A uniform approximation with simultaneous interpolation by analytic functions. (Russian. Armenian and English summaries) **(82g:30067)**
- Vinogradov, S. A. On free interpolation in Bergman spaces. (Russian. English summary) **(82k:46038)**
- (with Gorin, E. A.; Hruščev, S. V.) Free interpolation in H^∞ in the sense of P. Jones. (Russian. English summary) **(82k:46039)**
- (with Kotočigov, A. M.) Some remarks on interpolation by analytic functions that belong to Besov spaces B_p^0 . (Russian. English summary) **(82k:46040)**

30E10 Approximation in the complex domain

- Ahern, Patrick (with Rao, N. V.) The rational defect of a plane domain. **82h:30041**
- Andriev'skii, V. V. Approximation of functions of a complex variable on arcs. (Russian) **82b:30042**
- Direct theorems of the theory of approximation on quasiconformal arcs. (Russian) **82a:30048**

- (with Israfilov, D. M.) Approximation of functions on quasiconformal curves by rational functions. (Russian. Azerbaijani and English summaries) **82m:30039**
- Constructive characterization of functions of Hölder classes on continua without exterior zero angles. (Russian. English summary) **82j:30051**
- (with German, S. P.) Polynomial approximations on quasiconformal arcs. (Russian. Armenian and English summaries) **82m:30040**
- (with Bili, V. I.) Approximation of functions in domains with a quasiconformal boundary. (Russian) **82f:30034**
- Aptekarev, A. I. Asymptotic behavior of Hadamard determinants and convergence of rows of Padé approximants for a sum of exponents. (Russian) **82e:30047**
- Convergence of rational approximations to a set of exponential functions. (Russian. English summary) **82h:30039**
- Arakeljan, N. U. (with Avestisjan, R. A.) Best uniform approximation by meromorphic functions on the real axis. (Russian) **82m:30041**
- Avestisjan, R. A. See Arakeljan, N. U., **82m:30041**
- Baranova, V. A. (with Nguen Tu Than') Uniform approximation of functions by generalized polynomials in multiply connected domains. (Russian. English summary) **82g:30064**
- Bili, V. I. See Tamrazov, P. M., **82h:30047** and Andrievskii, V. V., **82f:30034**
- Brutman, L. On the polynomial and rational projections in the complex plane. **82h:30043**
- (with Pinkus, A.) On the Erdős conjecture concerning minimal norm interpolation on the unit circle. **82h:30044**
- Caffisch, Russel E. (with Nunan, Kevin C.) Evaluation of a function at infinity from its power series. **82d:30032**
- Cufi, Julian. The quotients of the algebra of entire functions. (Spanish) **82a:30049**
- Fisher, S. D. (with Michelli, Charles A.) The n -widths of sets of analytic functions. **82j:30052**
- Gaier, Dieter. ★Vorlesungen über Approximation im Komplexen. (German) [Lectures on approximation in the complex domain] **82i:30055**
- German, S. P. See Andrievskii, V. V., **82m:30040**
- Ibragimov, I. I. ★Теория приближения целых функций. (Russian) [The theory of approximation by entire functions] **82a:30033**
- Israfilov, D. M. (with Mamedhanov, Dž. I.) Some problems of rational and polynomial approximation on arcs in space C metrics. (Russian. Azerbaijani and English summaries) **82h:30045**
- See also Andrievskii, V. V., **82m:30039**
- Janik, Adam. On approximation and interpolation of entire functions. **82g:30065**
- Kas'janov, V. I. Rational approximation of integrals of Cauchy type and approximate solution of the Riemann problem for a half plane. (Russian) **82g:30066**
- Kaufman, Robert P. (with Wu, Jang Mei G.) Removable singularities for analytic or subharmonic functions. **82e:30048**
- Kithajjan, A. A. On a generalization of Fejér's kernel. (Russian. Armenian summary) **82e:30049**
- Korevaar, J. Polynomial and rational approximation in the complex domain. **82j:30053**
- Lou, Yuan Ren. See Shen, Xie Chang, **82f:30039** and **82j:30054**
- Lubinsky, D. S. Diagonal Padé approximants and capacity. **82e:30050**
- On nondiagonal Padé approximants. **82e:30051**
- Lungu, K. N. On the properties of functions connected with the behavior of poles of Padé approximants. (Russian) **82h:30038**
- Mamedhanov, Dž. I. Strengthening of the Plemelj-Privalov theorem and problems of best approximation. (Russian) **82f:30035**
- See also Israfilov, D. M., **82h:30045**
- Martirosjan, V. A. Growth of coefficients of polynomials that realize uniform approximation on the complex plane. (Russian. Armenian and English summaries) **82f:30036**
- Michelli, Charles A. See Fisher, S. D., **82j:30052**
- Nersisjan, A. A. A uniform approximation with simultaneous interpolation by analytic functions. (Russian. Armenian and English summaries) **82g:30067**
- Nguen Tu Than' See Baranova, V. A., **82g:30064**
- Nunan, Kevin C. See Caffisch, Russel E., **82d:30032**
- Petković, Miodrag S. On a generalisation of the root iterations for polynomial complex zeros in circular interval arithmetic. (German summary) **82g:30068**
- Pinkus, A. See Brutman, L., **82h:30044**
- Rahman, Q. I. Some questions of uniqueness concerning interpolation by entire functions of exponential type. **82g:30069**
- Rahmanov, E. A. Convergence of Padé approximations in classes of holomorphic functions. (Russian) **82f:30037**
- Rao, N. V. See Ahern, Patrick, **82h:30041**
- Reich, Edgar. L^1 -approximation of meromorphic functions. **82f:30038**
- Rivlin, T. J. Best uniform approximation by polynomials in the complex plane. **82e:30059**
- Rizvi, S. R. H. On the degree of approximation of analytic functions. **82m:30042**
- Scheinberg, Stephen. Erratum: "Uniform approximation by meromorphic functions having prescribed poles" [Math. Ann. 243 (1979), no. 1, 83-93; MR 81a:30021]. **82h:30040**
- Erratum: "Uniform approximation by meromorphic functions having prescribed poles" [Math. Ann. 243 (1979), no. 1, 83-93; MR 81a:30021]. **82f:30056**
- Schwingendorf, Keith E. Uniform polynomial approximation. **82d:30034**
- Shen, Xie Chang (with Lou, Yuan Ren) The best approximation by rational functions in a domain of the complex plane. (Chinese) **82j:30054**
- (with Lou, Yuan Ren) Best approximation by rational functions in the space E_p ($p > 1$). (Chinese. English summary) **82f:30039**
- Shih, Mou Hsiang (with Yeh, Cheh Chih) Successive approximations in complex analysis. **82f:30040**
- Shull, C. S. F. Mean interpolation of entire functions. **82h:30041**
- Širokov, N. A. Approximation properties of a continuum. (Russian. English summary) **82a:30050**
- Stefanescu, I. Sabba. On the stable analytic continuation with rational functions. **82j:30055**
- Storozhenko, E. A. Approximation of functions of class H^p , $0 < p < 1$. (Russian) **82h:30046**
- Stray, Arne. Vitushkin's method and some problems in approximation theory. **82g:30070**
- Tamrazov, P. M. (with Bili, V. I.) Polynomial approximations and modulus of continuity of functions in domains with quasiconformal boundaries. (Russian) **82h:30047**
- Vagarijjan, A. A. Uniqueness theorems for bounded analytic functions and their application in the theory of approximation. (Russian. Armenian and English summaries) **82d:30035**
- Wang, James Li Ming. Approximation by rational modules on boundary sets. **82h:30042**
- Wu, Jang Mei G. See Kaufman, Robert P., **82e:30048**
- Yeh, Cheh Chih. See Shih, Mou Hsiang, **82f:30040**
- secondary classifications:
- Andersson, Jan-Erik. Approximation of e^{-x} by rational functions with concentrated negative poles. **(82m:41014)**
- Andrievskii, V. V. (with German, S. P.) Approximation on quasiconformal arcs. (Russian. English summary) **(82e:30022)**
- Avestisjan, R. A. On the representation of analytic functions in the disc as infinite products of Blaschke type. (Russian. Armenian summary) **(82d:30028)**
- Bat'kaev, I. M. Inequalities for algebraic polynomials and approximation theorems in domains with quasiconformal boundary. (Russian. Azerbaijani and English summaries) **(82a:30025)**
- Boghossian, Artin. Tangential approximation of continuous functions on open sets. **(82j:31001)**
- Brennan, James E. Point evaluations, approximation in the mean and analytic continuation. **(82d:30006)**
- Brent, Richard P. (with Gustavson, Fred G.; Yun, David Y. Y.) Fast solution of Toeplitz systems of equations and computation of Padé approximants. **(82d:65033)**
- Cavaretta, A. S., Jr. (with Sharma, Ambikeshwar; Varga, R. S.) Interpolation in the roots of unity: an extension of a theorem of J. L. Walsh. **(82j:30049)**
- Dunham, Charles B. (with Williams, Jack) Rate of convergence of discretization in Chebyshev approximation. **(82f:41024)**
- Dynkin, E. M. Constructive characterization of S. L. Sobolev and O. V. Besov classes. (Russian) **(82k:46051)**
- Filozol, L. I. Approximation of functions of Herglotz class by continued fractions. (Ukrainian. Russian summary) **(82i:30006)**
- Geddes, K. O. Block structure in the Chebyshev-Padé table. **(82h:65013)**
- German, S. P. See Andrievskii, V. V., **(82e:30022)**
- Gilewicz, Jacek. ★Approximants de Padé. (French) [Padé approximants] **(82e:41015)**
- Gil'mudimova, A. Ja. Theorems of A. Ostrowski's type and invariant subspaces of analytic functions. (Russian) **(82k:30056)**
- Glashoff, Klaus (with Roleff, K.) A new method for Chebyshev approximation of complex-valued functions. **(82e:65011)**
- Graves-Morris, P. R. The convergence of ray sequences of Padé approximants of Stieltjes functions. **(82j:65016)**
- Gustavson, Fred G. See Brent, Richard P.; et al., **(82d:65033)**
- Hayman, Walter Kurt. An approximation theorem with applications to Iversen's theorem. **(82g:30052)**
- Kalagin, V. A. A note on the structure of Padé's table. (Russian. English summary) **(82h:41018)**
- Kozłowska, Grażyna. Approximation by entire functions of two variables in the $L_p(D)$ spaces where $p = (p_1, p_2)$ and $0 < p_1 < 1$, $0 < p_2 < 1$. I. (Polish. Russian and English summaries) **(82h:41019)**
- Kulikov, I. V. Convergence of Bieberbach polynomials to a conformal mapping in the case of polygonal domains. (Russian) **(82d:30010)**
- López Lagomasino, Guillermo. See Vavilov, V. V.; et al., **(82e:41026)**
- Mamedhanov, Dž. I. Problems of the theory of best polynomial approximation with fixed weight. (Russian. Azerbaijani and English summaries) **(82d:41009)**
- Martirosjan, V. M. On the closure, minimality and property of being a basis of the simplest rational fractions on a system of rays. (Russian. Armenian and English summaries) **(82g:30010)**
- Meleško, I. N. Approximate solution of a Hilbert boundary value problem. (Russian) **(82d:30044)**
- Musaev, K. M. Approximation in the mean of generalized analytic functions. (Russian. Azerbaijani and English summaries) **(82e:30070)**
- Newman, Donald J. Polynomials and rational functions. **(82h:30006)**
- Prohorov, V. A. See Vavilov, V. V.; et al., **(82e:41026)**
- Reich, Axel. Werteverteilung von Zetafunktionen. **(82h:10051)**
- Roleff, K. See Glashoff, Klaus, **(82e:65011)**
- van Rossum, H. Generalized Padé approximants. **(82d:41018)**
- Schneider, Walter J. Approximation and harmonic measure. **(82g:30058)**
- Šeremet, M. M. A conjecture of Erdős and Reddy and the rational approximation of Mittag-Leffler type functions. (Russian summary) **(82e:41022)**
- Sharma, Ambikeshwar. See Cavaretta, A. S., Jr.; et al., **(82j:30049)**
- Trent, Tavan T. A Müntz-Szász theorem for $C(\bar{D})$. **(82h:46071)**
- Tung, S. H. Extension of Bernstein's theorem. **(82k:32013)**
- Varga, R. S. See Cavaretta, A. S., Jr.; et al., **(82j:30049)**
- Vavilov, V. V. (with López Lagomasino, Guillermo; Prohorov, V. A.) An inverse problem for the rows of a Padé table. (Russian) **(82e:41026)**
- Vitushkin, A. G. Approximation of entire functions and signal coding with finite spectrum. (Russian) **(82h:30024)**
- Williams, Jack. See Dunham, Charles B., **(82f:41024)**
- Yun, David Y. Y. See Brent, Richard P.; et al., **(82d:65033)**

30E15 Asymptotic representations in the complex domain

- Farkov, Ju. A. Asymptotic properties of generalized basis functions of Faber-Erohin. (Russian) **82e:30052**
- Kovalevskii, M. A. Uniform asymptotic behavior of an integral that is connected with a class of entire functions. (Russian. English summary) **82k:30039**
- Nikitin, E. M. Simultaneous Padé approximants. (Russian) **82e:30053**

Pittbauer, F. (with Wyrwich, Herbert) Ganze Funktionen mit gebrochenen asymptotischen Potenzreihen-Entwicklungen. (English and Serbo-Croatian summaries) 82c:30060

Wyrwich, Herbert See Pittbauer, F., 82c:30060

secondary classifications:

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Soni, K. (with Soni, Raj P.) A note on uniform asymptotic expansions of finite K , and related transforms with explicit remainder. (82a:41029)

Soni, Raj P. See Soni, K., (82a:41029)

30E20 Integration, integrals of Cauchy type, integral representations of analytic functions [See also 45Exx.]

Abbasov, Z. M. A basic integral along a nonsmooth curve with integrable density. (Russian) 82j:30056

Asirov, R. A. (with Salayev, V. V.) A double singular integral with continuous density. (Russian) 82c:30061

Aveli, Yusuf Characterization of shell domains by quadrature identities. 82f:30041

Bavrin, I. I. (with Guseinov, V. A.; Ležnev, V. G.) Integro-differential operators and integral representations of holomorphic functions. (Russian) 82j:30057

Operators and generalized integral formulas of Cauchy, Schwarz and Poisson. (Russian. Kazakh summary) 82i:30057

Bikčantaev, I. A. Analogues of the Cauchy kernel on a Riemann surface and some of their applications. (Russian) 82b:30043

Analogues of a Cauchy kernel on a Riemann surface and some applications of them. (Russian) 82b:30048

Džurbašjan, A. M. Factorization of certain general classes of functions meromorphic in a half plane. (Russian) 82c:30040

Gaziev, A. A singular operator with a Cauchy-Stieltjes integral along a closed curve. (Russian) 82i:30058

Guljaev, A. V. On properties of the Cauchy-Bavrin integral with a fixed point. (Russian) 82j:30058

Gusakov, V. A. See Bavrin, I. I.; et al., 82j:30057

Guseinov, E. G. (with Muhammadiev, M.) A singular integral along a smooth curve in spaces. (Russian) 82c:30062

Huillgol, R. R. Relation of the conjugate harmonic functions to $f(z)$ in cylindrical polar coordinates. 82b:30044

Jevtić, M. Spaces defined by the operators L_p^* and J_p^* . (Serbo-Croatian. English summary) 82f:30042

Kopfermann, Klaus Ein kurzer Beweis des Cauchyschen Integralsatzes. 82d:30036

Ležnev, V. G. See Bavrin, I. I.; et al., 82j:30057

Lu, Jian Ke A generalized residue theorem and its applications. (Chinese) 82j:30059

Muhammadiev, M. See Guseinov, E. G., 82c:30062

Njaga, V. I. See Sakaljuk, K. D., 82j:30061

Pyhteer, G. N. (with Šokamolov, I.) Some methods for the exact calculation of Cauchy-type integrals of a special form with weight function $\omega(x) = -i\sqrt{x^2 - 1}$. (Russian. Tajiki summary) 82j:30060

Rahimov, R. M. A singular integral and an integral of Cauchy type over a system of nonintersecting nonsmooth closed contours. (Russian) 82d:30037

Sakai, Makoto On analytic functions with finite Dirichlet integrals. (Japanese) 82i:30059

Sakaljuk, K. D. (with Njaga, V. I.) Inversion of a supersingular integral with a Cauchy-Abel kernel. (Russian) 82j:30061

Salayev, V. V. See Asirov, R. A., 82c:30061

Šokamolov, I. See Pyhteer, G. N., 82j:30060

Stepanjan, S. S. Integral representation of functions of classes A and H_p . (Russian) 82g:30071

secondary classifications:

Abdullaev, A. D. Solution of the Riemann boundary value problem. (Russian) (82m:30043)

Beighton, S. See Noble, B., (82d:65028)

Coifman, R. R. (with Meyer, Yves) Une généralisation du théorème de Calderón sur l'intégrale de Cauchy. (82a:42015)

Dončev, T. A theorem of Phragmén-Lindelöf type. (Bulgarian. Russian and English summaries) (82c:35032)

Gaziev, A. See Mansurov, M., (82k:30051)

German, S. P. Integral representation of an interpolation polynomial in domains without external zero-angles. (Russian) (82h:30038)

Gregor, Jifi Integral representation of n -variable positive real functions. (82i:32007)

Hammer, C. L. See Weber, T. A., (82a:34025)

Jörjic, B. A continual analogue of the Fabry theorem. (Russian. English summary) (82c:30002)

Kopaev, A. V. On the expansion of holomorphic functions of two complex variables in quasipower bases. (Russian) (82j:32004)

Kumar, Sheo A note on quadrature formulae for Cauchy principal value integrals. (82d:65027)

Lether, Frank G. Some observations on Gauss-Legendre quadrature error estimates for analytic functions. (82c:65024)

Magnaradze, L. G. A new representation of a pair of analytic functions and its applications. (Russian. Georgian and English summaries) (82c:30064)

Mamedhanov, Dž. I. Strengthening of the Plemelj-Privalov theorem and problems of best approximation. (Russian) (82f:30035)

Mansurov, M. (with Gaziev, A.) Integral of Cauchy type in the theory of analytic functions according to Vekua. I. (Russian) (82k:30051)

Meyer, Yves See Coifman, R. R., (82a:42015)

Muhidinov, N. M. Solution of a special two-dimensional vector boundary value problem of filtration. (Russian) (82m:76060)

Noble, B. (with Beighton, S.) Error estimates for three methods of evaluating Cauchy principal value integrals. (82d:65028)

Parfenov, O. G. The asymptotic behavior of singular numbers of imbedding operators of some classes of analytic functions. (Russian) (82i:47028)

Pyhteer, G. N. ★Точные методы вычисления интегралов типа Коши. (Russian) [Exact methods for calculating integrals of Cauchy type] (82m:44006)

Rawlins, A. D. (with Williams, W. E.) Matrix Wiener-Hopf factorisation. (82c:15020)

Singh, Prem See Singh, Prithvipal, (82i:30020)

Singh, Prithvipal (with Singh, Prem) Integral representation of functions in certain classes of univalent functions. (82i:30020)

Weber, T. A. (with Hammer, C. L.) A note on completeness. (82a:34025)

Williams, W. E. See Rawlins, A. D., (82c:15020)

Yamashita, Shinji Dirichlet-finite outer functions. (82j:30047)

Znamenskii, S. V. Analogue of Leont'ev's theorem for Euler operators and the Vostreco formula for a strongly star-shaped domain $D \subset \mathbb{C}^n$. (Russian) (82m:32004)

30E25 Boundary value problems [See also 45Exx.]

Abdullaev, A. D. Solution of the Riemann boundary value problem. (Russian) 82m:30043

Ahalaja, G. Ja. Riemann-Hilbert boundary value problem with discontinuous coefficients for generalized analytic functions. (Russian. Georgian and English summaries) 82g:30072

Akbarov, R. A homogeneous Riemann boundary value problem with prescribed principal parts. (Russian. Tajiki summary) 82f:30043

The Riemann problem with given principal parts on the plane. (Russian. Tajiki summary) 82m:30044

The Hilbert mixed boundary value problem for a simply connected domain with given principal parts. (Russian. Tajiki summary) 82j:30062

Aksent'ev, L. A. (with Žurbenko, L. N.) Questions of well-posedness in inverse boundary value problems. (Russian) 82d:30040

(with Il'inskii, N. B.; Nužin, M. T.; Salimov, R. B.; Tumalev, G. G.) The theory of inverse boundary value problems for analytic functions and its applications. (Russian) 82d:30038

Alekhin, A. G. An inhomogeneous Riemann boundary value problem with an infinite index on the Ljapunov contour. (Russian. English summary) 82c:30054

The Riemann boundary value problem with infinite index in the case of many-sided vorticity. (Russian. English summary) 82m:30045

Arlanov, G. V. Solvability of a homogeneous nonlinear boundary value problem of power type. (Russian) 82b:30049

Avhadiev, R. G. (with Žurbenko, L. N.) Inverse boundary value problems in polar coordinates with singular points on the boundaries. (Russian) 82d:30039

Bessičinov, M. E. A boundary value problem with shift for analytic functions. (Russian) 82c:30055

On a boundary value problem with Carleman shift for analytic functions. (Russian) 82j:30063

Brennerman, M. H. The Riemann problem on a countable set of convex contours that are condensed toward a continuum. (Russian) 82b:30045

Čibrikova, L. I. A special case of the Riemann problem on an unbounded contour. II. (Russian) 82d:30041

Boundary value problems of the theory of analytic functions on Riemann surfaces. (Russian) 82a:30051

Elizarov, A. M. Solvability of a mixed inverse boundary value problem for a doubly-connected domain. (Russian) 82c:30063

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Fang, Ai Nong On nonlinear mixed boundary value problem. 82b:30047

Gerus, O. F. On a singular integral equation and Riemann boundary value problem. (Russian) 82i:30060

González Diegos, Belarmino The exceptional case of the Riemann boundary value problem. (Russian) 82d:30042

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Idemen, Mithat A new method to obtain exact solutions of vector Wiener-Hopf equations. 82d:30043

Il'inskii, N. B. See Aksent'ev, L. A.; et al., 82d:30038

Isahanov, R. S. A general problem for holomorphic functions. (Russian) 82b:30050

Iskenderov, B. B. A nonlinear boundary value problem for piecewise analytic functions. (Russian) 82c:30056

Jacko, A. I. The generalized Riemann boundary value problem in L_p spaces with weight. (Russian) 82m:30046

Kac, B. A. A boundary value problem with nonmutually single-valued shifts on a countable set of circles. (Russian) 82c:30057

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Kokilašvili, V. M. (with Paatašvili, V. A.) Discontinuous problem of linear conjugation and singular integral equations. (Russian) 82g:30073

Litvinčuk, G. S. (with Spitkovskii, I. M.) Exact estimates of defect numbers of the generalized Riemann boundary value problem. (Russian) 82b:30051

Lu, Jian Ke On doubly periodic Riemann boundary value problems along open arcs. (Chinese. English summary) 82g:30074

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Magnaradze, L. G. A new representation of a pair of analytic functions and its applications. (Russian. Georgian and English summaries) 82c:30064

Mandziavdze, G. F. Some families of boundary value problems of linear conjugation. (Russian. Georgian and English summaries) 82m:30047

Melesko, A. N. Approximate solution of a homogeneous Hilbert boundary value problem for a disk using polylogarithms. (Russian) 82j:30066

Melesko, I. N. Approximate solution of a Hilbert boundary value problem. (Russian) 82d:30044

- Meunargija, O. V.** Construction of an effective solution of the linear conjugation problem for several unknown functions. (Russian. English summary) **82a:30045**
- Naila, M. T.** See **Akseyev, L. A.**; et al., **82a:30038**
- Pastashvili, V. A.** See **Kokilashvili, V. M.**, **82g:30073**
- Pen'kov, V. B.** See **Tolokonnikov, L. A.**, **82h:30048**
- Primačuk, L. P.** Nonlinear problem of conjugation on an open arc for two holomorphic functions. (Russian) **82f:30044**
- Rahimov, R. M.** A remark on the Riemann boundary value problem in the case of intersecting contours. (Russian) **82c:30058**
- Rysjak, N. A.** On the question of solution of a nonlinear boundary value problem. (Russian. English summary) **82c:30059**
- Salimov, Ja. S.** A loaded problem with an integral boundary condition in a normed ring. (Russian. Azerbaijani summary) **82f:30045**
- Salimov, R. B.** See **Akseyev, L. A.**; et al., **82d:30038**
- Selzer, V. A.** The Riemann boundary value problem in classes of Jordan boundaries. (Russian) **82h:30052**
- Selim, M. S.** A nonlinear loaded Hilbert problem. (Russian) **82i:30062**
- The homogeneous Riemann problem on a nonsmooth open curve. (Russian) **82c:30060**
- The nonhomogeneous Riemann problem on a nonsmooth open curve. (Russian) **82c:30061**
- Siewert, C. E.** (with Kelley, C. T.) An analytical solution to a matrix Riemann-Hilbert problem. (German summary) **82d:30046**
- Šilin, A. P.** On a boundary value problem with a shift on the open Riemann surfaces with an edge. (Russian. English summary) **82c:30065**
- Širokova, E. A.** Application of homotopic families of closed curves for studying the univalence of the solution of inverse boundary value problems. (Russian) **82a:30052**
- Skorobod, S. F.** On some multielement boundary value problems with non-Carleman shift for functions analytic in a domain. (Russian. Georgian and English summaries) **82c:30042**
- Soldator, A. P.** A problem of linear conjugation with shift on a piecewise-smooth line in weight spaces. (Russian) **82d:30047**
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- See also **Litvinčuk, G. S.**, **82h:30051**
- Szmitko, Wanda** On nonlinear Carleman boundary problem with an infinite index. **82h:30053**
- Tolokonnikov, L. A.** (with Pen'kov, V. B.) Application of the Riemann boundary value problem with a discontinuous matrix coefficient to mechanics. (Russian) **82h:30048**
- Tumašev, G. G.** See **Akseyev, L. A.**; et al., **82d:30038**
- Zapuskalova, T. A.** An inhomogeneous Riemann boundary value problem on a spiral-shaped contour. (Russian) **82d:30048**
- Žurbenko, L. N.** See **Avhadiyev, R. G.**, **82d:30039** and **Akseyev, L. A.**, **82d:30040**
- secondary classifications:
- Ahundov, M. B.** See **Amenzade, Ju. A.**; et al., **(82a:73059)**
- Amenzade, Ju. A.** (with Ahundov, M. B.; Efendieva, S. A.) Pressing of two rigid symmetrical stamps into a ring. (Russian. Azerbaijani and English summaries) **(82a:73059)**
- Antanovskii, L. K.** Complex representation of solutions of a problem with free boundary for the Stokes system. (Russian) **(82m:35123)**
- Asirov, R. A.** (with Saliev, V. V.) A double singular integral with continuous density. (Russian) **(82c:30061)**
- Bikentayev, I. A.** Analogues of a Cauchy kernel on a Riemann surface and some applications of them. (Russian) **(82h:30048)**
- Bliev, N. K.** Homeomorphisms of the Beltrami equation in fractional spaces. (Russian) **(82a:35049)**
- Brînzănescu, Ligia** Théorème d'existence de la solution d'un problème aux limites pour le mouvement d'un gaz ionisé à conductivité tensorielle dans un générateur M.H.D. à électrodes finis. **(82j:76099)**
- Buchanan, J.** (with Gilbert, R. P.) The Hilbert problem for hyperanalytic functions. **(82i:30068)**
- Cai, Hai Tao** The problem of periodic contact in the plane theory of elasticity. (Chinese) **(82h:73007)**
- Černyi, I. V.** See **Kapšivii, O. O.**, **(82a:30057)**
- Didenko, V. D.** On an approximate solution of singular integral equations with Carleman shift and complex conjugate values of the unknown function. (Russian) **(82c:45007)**
- Džuraev, A.** Some two-dimensional integral equations over a bounded domain. (Russian) **(82a:45012)**
- Efendieva, S. A.** See **Amenzade, Ju. A.**; et al., **(82a:73059)**
- (Erugin, N. P.)** See **Štokalo, I. Z.**, **(82a:01047)**
- Gilbert, R. P.** See **Buchanan, J.**, **(82i:30068)**
- Goman, O.** (with Popov, V. V.) A new method of using the relationship between p -harmonic and analytic functions for a solution to the problems of potential theory. (Russian. English summary) **(82c:31009)**
- González Diego, Belarmino** Singular integral equations and the Riemann boundary value problem on nonsmooth closed curves. (Russian) **(82c:45003)**
- Ibragimov, V. A.** On exact solutions of the static problem of complex shear. **(82k:73032)**
- Jakimov, N. D.** See **Viničenko, A. A.**, **(82a:68182)**
- Juhanonov, N. N.** An integral equation of convolution type containing the complex-conjugate value of the unknown function, and its approximate solution. (Russian. Tajiki summary) **(82c:45010)**
- Jurzanova, T. K.** The Hilbert boundary value problem for a "logarithmic hypercone". (Russian) **(82h:32009)**
- Kakičev, V. A.** On the connection between γ -factorization of a function of two variables and its factorization. (Russian) **(82j:32013)**
- (with Šelković, V. M.) Riemann's problem for a p -cone in Vladimirov algebras. (Russian) **(82h:32010)**
- Kapšivii, O. O.** (with Černyi, I. V.) A problem on the complex x -analytic potential of a system of annular coaxial discs. (Russian. English summary) **(82a:30057)**
- Kas'janov, V. I.** Rational approximation of integrals of Cauchy type and approximate solution of the Riemann problem for a half plane. (Russian) **(82g:30066)**
- Kaziev, A.** A boundary value problem with shift for a system of equations of composite type. (Russian. Tajiki summary) **(82m:45006)**
- Kulagina, M. F.** The Riemann problem in the case of a countable set of contours in a class of generalized analytic functions. (Russian) **(82b:30058)**
- Kuprin, V. A.** Application of Faber series to an approximate solution of a problem of linear conjugation. (Russian) **(82c:41012)**
- Kvitho, A. N.** Riemann vector-matrix problem for an elliptic system of first-order differential equations in the case of a complex contour on a Riemann surface. (Russian) **(82m:35046)**
- Lí, Ming Zhong** The generalized Riemann-Hilbert boundary value problem for a system of second-order quasilinear elliptic equations. (Chinese. English summary) **(82j:35047)**
- Luk'janenko, V. A.** An equation of smooth transition in the space of slowly growing functions. (Russian. English summary) **(82d:45009)**
- Pal'cer, B. V.** Convolution equation on a finite interval for a class of symbols having power asymptotic behavior at infinity. (Russian) **(82c:45006)**
- Popov, V. V.** See **Goman, O.**, **(82c:31009)**
- Saliev, V. V.** See **Asirov, R. A.**, **(82c:30061)**
- Šelković, V. M.** See **Kakičev, V. A.**, **(82h:32010)**
- el-Sirafy, Ibrahim H.** Problem of a circular annular elastic plate for which normal stress and tangential displacement are given on the boundary. **(82h:73008)**
- Spitkovskii, I. M.** Multipliers that do not affect factorizability. (Russian) **(82g:42008)**
- Štokalo, I. Z.** An important contribution to the development of differential equations and their application. (Russian) **(82a:01047)**
- Telugov, H. T.** The Dini-Schwarz formula for infinite circular domains. (Russian) **(82c:30016a)**
- The Cisotti formula for infinite circular domains. (Russian) **(82c:30016b)**
- Tutschke, Wolfgang** The Riemann-Hilbert problem for nonlinear systems of first-order equations of elliptic type. (Russian) **(82j:35068)**
- Reduction of the problem of linear conjugation for first-order nonlinear elliptic systems in the plane to an analogous problem for holomorphic functions. **(82b:35009)**
- Viničenko, A. A.** (with Jakimov, N. D.) An analogue method for solution of a Hilbert boundary value problem. (Russian) **(82a:68182)**
- 30E99 None of the above, but in this section
- Kleitman, Daniel J.** (with Li, Shuo-Yen Robert) On the partial sums of the rearrangements of a complex series. **82c:30066**
- Li, Shuo-Yen Robert** See **Kleitman, Daniel J.**, **82c:30066**
- Mond, David** On the cohomology associated to a complex linear differential operator. (Spanish) **82a:30053**
- Stolarsky, Kenneth B.** Mapping properties, growth, and uniqueness of Vieta (infinite cosine) products. **82a:30054**
- secondary classifications:
- Abdrhmanov, A. M.** On a first-order system which is degenerating at a point. (Russian) **(82f:35050)**
- Baba-Zade, M. A.** Direct and inverse estimate for an integral with a parameter along a closed contour. (Russian) **(82d:45021)**
- Bui Huy Qui** (with Mizuta, Yoshihiro) On the existence of harmonic functions in L^p . **(82h:31005)**
- Dal, Ju. M.** Plane problems of the theory of cracks, solvable by means of an analytic function. (Russian) **(82h:73048)**
- Driessen, P.** See **Holt, A. R.**, **(82d:81033)**
- Holt, A. R.** (with Driessen, P.) Analytical angular integration of some products of hydrogenic bound-free first Born matrix elements. **(82d:81033)**
- Kamockii, V. I.** Estimate of integral means in the class $S(\alpha)$. (Russian) **(82c:30013)**
- Melamed, E. Ja.** Realization of positive matrix-valued functions according to Darlington. Polynomial realization in the case of degeneration. (Russian. Armenian and English summaries) **(82f:15016)**
- Mizuta, Yoshihiro** See **Bui Huy Qui**, **(82h:31005)**
- Nishimoto, Katsuyuki** Fractional differentiation of products and $(\log z)_\nu$ (continued). **(82d:26005a)**
- Some properties of the fractional differentiated trigonometric functions. **(82d:26005b)**
- Simonenko, I. B.** On the relation between local factorizability and the local Noethericity property. (Russian. Georgian and English summaries) **(82f:45004)**
- Sugiura, Katsuo** A mixed problem for an infinite elastic medium containing a circular inclusion and a circular hole. **(82f:73015)**
- Tanaka, Chuji** Some applications of the complex analysis to matrix functions. **(82k:15020)**
- 30Fxx Riemann surfaces
- Farkas, Hershel M.** (with Kra, Irwin) ★ Riemann surfaces. **82c:30067**
- Kra, Irwin** See **Farkas, Hershel M.**, **82c:30067**
- secondary classifications:
- Clemens, Charles Herbert** ★ A scrapbook of complex curve theory. **(82i:14001)**
- (Kra, Irwin)** See **Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference**, **(82f:32002)**
- (Maskit, Bernard)** See **Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference**, **(82f:32002)**
- Conference:
- Riemann Surfaces and Related Topics** ★ Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. **(82f:32002)**

- Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference**
 ★Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. (82f:32002)
Stony Brook, N.Y. ★Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. (82f:32002)

30F10 Compact Riemann surfaces and uniformization [See also 14H15, 32G15.]

- Buser, Peter** Sur le spectre de longueurs des surfaces de Riemann. (English summary) 82d:30049
Hirashita, Yukio On the Weierstrass points on open Riemann surfaces. 82k:30043
Kato, Takao On Weierstrass points whose first nongaps are three. 82f:30046
Kuribayashi, Akikazu A generalization of λ function. 82c:30062
Mednyh, A. D. Riemann surfaces with a cyclic group of automorphisms. (Russian) 82k:30049
Wason, Judith C. On infinite Nielsen kernels. 82i:30063

secondary classifications:

- Chetiya, B. P.** On genres of compact Riemann surfaces admitting solvable automorphism groups. (82k:14028)
Horuchi, Ryutaro On the existence of meromorphic functions with certain lower order on nonhyperelliptic Riemann surfaces. (82i:14013)
Hubbard, John H. The monodromy of projective structures. (82k:14009)
Huber, Heinz Über die Eigenwerte des Laplace-Operators auf kompakten Riemannschen Flächen. II. (82k:58093)
 On the spectrum of the Laplace operator on compact Riemann surfaces. (82a:58051)
 Ueber die Dimension der Eigenräume des Laplace-Operators auf Riemannschen Flächen. (82k:58094)
Lin, Fu Lai On cyclic automorphism groups of Riemann surfaces and theta functions. (82j:14026)
Rabinowitz, Joshua H. Positivity notions for holomorphic line bundles over compact Riemann surfaces. (82k:32069)
Strebel, Kurt ★Vorlesungen über Riemannsche Flächen. (German) [Lectures on Riemannian surfaces] (82c:30002)
Takigawa, Nobumasa Weierstrass points and the vector of Riemann constants. (Japanese summary) (82a:14019)

30F15 Harmonic functions on Riemann surfaces

- Nakai, Mitsuru** (with Sario, Leo) Existence relations between harmonic and biharmonic Green's functions. (Italian summary) 82f:30047
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secondary classifications:

- Heins, Maurice** A realization problem in the theory of analytic curves. (82m:32001)
Strebel, Kurt ★Vorlesungen über Riemannsche Flächen. (German) [Lectures on Riemannian surfaces] (82c:30002)

30F20 Classification theory of Riemann surfaces

- Efroymsen, Gustave A.** The Riemann mapping theorem for planar Nash rings. 82j:30068
Gehring, F. W. Spirals and the universal Teichmüller space. 82g:30075
Heins, Maurice Weierstrassian global complex analysis from the Riemannian point of view. 82j:30069
Järvi, Pentti Meromorphic functions on certain Riemann surfaces with small boundary. 82k:30044
Minda, Carl David The hyperbolic metric and coverings of Riemann surfaces. 82c:30063

secondary classifications:

- Asakura, Soichi** A note on holomorphic differentials. (Japanese summary) (82f:30048)
Gilman, Jane On the Nielsen type and the classification for the mapping class group. (82i:57006)
Harvey, W. J. Geometric structure of surface mapping class groups. (82h:57012)
Komiya, Kaname See Kuribayashi, Akikazu, (82i:14017)
Kuribayashi, Akikazu (with Komiya, Kaname) On the structure of the automorphism group of a compact Riemann surface of genus 3. (82i:14017)
Metzger, Thomas A. On BMOA for Riemann surfaces. (82m:30034)
Nishino, Toshio Value distribution of analytic functions of two variables. (Japanese) (82j:32001)
Wolpert, Scott The length spectrum as moduli for compact Riemann surfaces. (82i:58074)

30F25 Ideal boundary theory

- Osada, Masayuki** Harmonic metric and Koebe's theorem. 82k:30054
Rees, Charles Sparks (with Rees, Paul K.) Concerning transforms of Fuchsian groups. 82d:30050
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secondary classifications:

- Bikčantaev, I. A.** Analogues of the Cauchy kernel on a Riemann surface and some of their applications. (Russian) (82h:30043)
Maitani, Fumio Behavior spaces on finite bordered Riemann surfaces. (82k:30046)

- Niimura, Mikio** Cluster sets in the large of meromorphic functions on Riemann surfaces. (82h:30032)
Stegenga, David A. (with Stephenson, Kenneth) A geometric characterization of analytic functions with bounded mean oscillation. (82m:30036)
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30F30 Differentials on Riemann surfaces

- Asakura, Soichi** A note on holomorphic differentials. (Japanese summary) 82f:30048
Baskan, Turgut On a generalization of behaviour spaces and the Riemann-Roch theorem on open Riemann surfaces. 82i:30064
Gardiner, Frederick P. On a notion of quasiconformal rigidity for Riemann surfaces. 82m:30048
Halpern, Naomi A proof of the collar lemma. 82c:30064
Kusunoki, Yukio (with Taniguchi, Masahiko) A continuity property of holomorphic differentials under quasiconformal deformations. 82g:30076
Maitani, Fumio The method of linear operators for square integrable differentials on open Riemann surfaces and its applications. 82h:30050
 Behavior spaces on finite bordered Riemann surfaces. 82k:30046
 Remarks on the isomorphisms of certain spaces of harmonic differentials induced from quasiconformal homeomorphisms. 82c:30068
Masur, Howard Transitivity properties of the horocyclic and geodesic flows on moduli space. 82k:30047
Taniguchi, Masahiko On the variation of periods of holomorphic Γ_{bo} -reproducing differentials. 82c:30069
 See also Kusunoki, Yukio, 82g:30076

secondary classifications:

- Bikčantaev, I. A.** Analogues of a Cauchy kernel on a Riemann surface and some applications of them. (Russian) (82h:30048)
Čibrikova, L. I. Boundary value problems of the theory of analytic functions on Riemann surfaces. (Russian) (82a:30051)
Gardiner, Frederick P. On Jenkins-Strebel differentials for open Riemann surfaces. (82h:32035)
Hwang Ma, Shu Yin Periods of iterated integrals of holomorphic forms on a compact Riemann surface. (82k:14025)
Phužnikov, A. I. Harmonic mappings of Riemann surfaces and foliated manifolds. (Russian) (82g:58029)
Shiba, Masakazu Analytic mappings of a Riemann surface of finite type into a torus. (82f:14025)
Watanabe, Osamu Reproducing differentials and certain theta functions on open Riemann surfaces. (82f:30051)

30F35 Fuchsian groups and automorphic functions [See also 10Dxx, 20H10, 32Gxx, 32Nxx.]

- Aulaskari, Rauno** On F_0 -normality and additive automorphic functions of the first kind. 82c:30065
Beardon, A. F. Canonical generators of Fuchsian groups. 82h:30051
 (with Waterman, P. L.) Strongly discrete subgroups of $SL(2, \mathbb{C})$. 82i:30065
Čibrikova, L. I. (with Sil'vestrov, V. V.) Construction of an automorphic analogue of the Cauchy kernel for a class of properly discontinuous groups. (Russian) 82i:30066
Furusawa, Harushi The Hausdorff dimension of limit sets of some Fuchsian groups. 82j:30070
Jørgensen, Troels (with Marden, A.; Pommerenke, C.) Two examples of covering surfaces. 82k:30048
 See also Rosenberger, Gerhard, 82c:30071
Marden, A. See Jørgensen, Troels; et al., 82k:30048
Metzger, Thomas A. On the nonvanishing of certain Poincaré series. 82h:30055
Morikawa, Hisasi Some analytic and geometric applications of the invariant theoretic method. 82f:30049
Nicholls, Peter J. Garnett points for Fuchsian groups. 82h:30056
 Fundamental regions and the type problem for a Riemann surface. 82a:30055
 The orbital counting function for discrete groups of infinite volume. 82f:30050
Pommerenke, C. See Jørgensen, Troels; et al., 82k:30048
Puritzsky, Norman Quasi-Fricke polygons and the Nielsen convex region. 82c:30070
Rosenberger, Gerhard Eine Bemerkung zu einer Arbeit von T. Jørgensen. 82c:30071
Series, Caroline On coding geodesics with continued fractions. 82h:30052
Sil'vestrov, V. V. See Čibrikova, L. I., 82i:30066
Watanabe, Osamu Reproducing differentials and certain theta functions on open Riemann surfaces. 82f:30051
Waterman, P. L. See Beardon, A. F., 82i:30065

secondary classifications:

- Abu Osman, M. T.** (with Rosenberger, Gerhard) Embedding property of surface groups. (82a:20054)
Apanasov, B. N. Kleinian groups, Teichmüller space and Mostow's rigidity theorem. (Russian) (82g:22011)
Berberian, S. L. Boundary properties of subharmonic functions that generate normal families on subgroups of automorphisms of the unit disc. (Russian. Armenian and English summaries) (82c:31003)
Chetiya, B. P. On genres of compact Riemann surfaces admitting solvable automorphism groups. (82k:14028)
Čibrikova, L. I. (with Sil'vestrov, V. V.) Calculation of the genus and the Weierstrass points of a fundamental polygon of a functional group. (Russian) (82f:10036)
Cohen, Jeffrey Mitchell Families of compact Riemann surfaces with automorphism groups. (82g:14031)
Cohn, Harvey Minimal geodesics on Fricke's torus-covering. (82i:10033)
Coldewey, Hans-Dieter See Zieschang, H.; et al., (82h:57002)

- Doyle, Courtney (with James, David A.) Discreteness criteria and high order generators for subgroups of $SL(2, \mathbb{R})$. (82c:22028)
- Earle, Clifford J. Some intrinsic coordinates on Teichmüller space. (82j:32050)
- Fathi, Albert (with Laudenbach, F.) Les feuilletages mesurés. (See 82m:57003)
- Les feuilletages mesurés (suite). (See 82m:57003)
- James, David A. See Doyle, Courtney, (82c:22028)
- Kra, Irwin Canonical mappings between Teichmüller spaces. (82b:32036)
- Laudenbach, F. See Fathi, Albert, (See 82m:57003)
- Masur, Howard Uniquely ergodic quadratic differentials. (82a:32031)
- Metzger, Thomas A. On BMOA for Riemann surfaces. (82m:30034)
- Mostow, G. D. On a remarkable class of polyhedra in complex hyperbolic space. (82a:22011)
- Poincaré, V. Présentation d'ensemble des théorèmes de Thurston sur les surfaces. (See 82m:57003)
- Rappels de géométrie hyperbolique en dimension 2 et généralités sur $i: S \times S \rightarrow R_+$. (See 82m:57003)
- See also Fathi, Albert; et al. (See 82m:57003)
- Rosenberger, Gerhard See Abu Osman, M. T., (82a:20054)
- Silvestrov, V. V. See Čirikova, L. L. (82f:10026)
- Vogt, Elmar See Zieschang, H.; et al. (82c:57002)
- Wagreich, Philip Algebras of automorphic forms with few generators. (82c:10044)
- Automorphic forms and singularities with C^* -action. (82m:10045)
- Wason, Judith C. On infinite Nielsen kernels. (82i:30063)
- Wolpert, Scott An elementary formula for the Fenchel-Nielsen twist. (82k:32053)
- Zieschang, H. (with Vogt, Elmar; Coldewey, Hans-Dieter) Surfaces and planar discontinuous groups. (82c:57002)

30F40 Kleinian groups [See also 20H10.]

- Čučev, V. V. Schottky spaces of type (g, s, m) . (Russian) 82c:30066
- Kruškal', S. L. To the problem of the supports of Beltrami differentials for Kleinian groups. 82b:30057
- Nicholls, Peter J. Kleinian groups of divergence type. 82j:30071

secondary classifications:

- Beardon, A. F. (with Waterman, P. L.) Strongly discrete subgroups of $SL(2, \mathbb{C})$. (82i:30065)
- Bers, Lipman Finite-dimensional Teichmüller spaces and generalizations. (82k:32050)
- Kaul, Saroop K. (with Thompson, Dale V.) On a theorem of Nielsen. (82i:57007)
- Keen, Linda On hyperelliptic Schottky groups. (82a:32029)
- Kruškal', S. L. Some rigidity theorems for discontinuous groups. (Russian) (82k:20078)
- Nicholls, Peter J. The orbital counting function for discrete groups of infinite volume. (82f:30050)
- Taniguchi, Masahiko Remarks on topologies associated with squeezing a nondividing loop on compact Riemann surfaces. II. (82k:32052)
- Thompson, Dale V. See Kaul, Saroop K., (82i:57007)
- Waterman, P. L. See Beardon, A. F., (82i:30065)
- Zimmermann, Bruno Über Abbildungsklassen von Henkelkörpern. (82k:57002)

30F99 None of the above, but in this section

- Marden, A. (with Pommerenke, Ch.) Analytic self-mappings of infinite order of Riemann surfaces. 82c:30067
- Minda, Carl David (with Näkki, Raimo) Invariant metrics on Riemann surfaces. 82c:30049
- Näkki, Raimo See Minda, Carl David, 82c:30049
- Pommerenke, Ch. See Marden, A., 82c:30067
- Pranger, Walter Riemann surfaces and bounded holomorphic functions. 82i:30067
- Prill, David Primitive holomorphic maps of curves. 82a:30056

secondary classifications:

- Abikoff, William The real analytic theory of Teichmüller space. (82a:32028)
- Bikčantaev, I. A. Analogues of the Cauchy kernel on a Riemann surface and some of their applications. (Russian) (82b:30043)
- Brooks, Robert (with Matelski, J. Peter) The dynamics of 2-generator subgroups of $PSL(2, \mathbb{C})$. (82j:10045)
- Cohn, Harvey Conformal mapping on Riemann surfaces. (82a:30009)
- Douady, Adrien See Douady, Régine, (82b:12024)
- Douady, Régine (with Douady, Adrien) Algèbre et théories galoisiennes. 1. (French) [Algebra and Galois theories. 1] (82b:12024a)
- (with Douady, Adrien) Algèbre et théories galoisiennes. 2. (French) [Algebra and Galois theories. 2] (82b:12024b)
- Gilbert, K. Ja. Riemann surfaces of a type of function of a dual variable. (Russian) (82b:30059)
- Heins, Maurice Analytic entities having associated maps with dense images. (82b:32004)
- Weierstrassian global complex analysis from the Riemannian point of view. (82j:30069)
- Jørgensen, Troels Commutators in $SL(2, \mathbb{C})$. (82b:20053)
- Klič, Alois Some remarks on the Nevanlinna theory of holomorphic mappings of Riemann surfaces. (Czech summary) (82a:30038)
- Martens, Henrik H. Problems in the theory of closed Riemann surfaces. (82a:14011)
- Matelski, J. Peter See Brooks, Robert, (82j:10045)
- Morioka, Hisasi On differential invariants of holomorphic projective curves. (82a:14012)
- Nimura, Mikio Asymptotic point sets of analytic mappings. (82f:30028)
- Saito, Saburo The Rudin kernels on an arbitrary domain. (82a:30010)
- Scheinberg, Stephen Erratum: "Uniform approximation by meromorphic functions having prescribed poles" [Math. Ann. 243 (1979), no. 1, 83-93; MR 81a:30021]. (82b:30040)

- Erratum: "Uniform approximation by meromorphic functions having prescribed poles" [Math. Ann. 243 (1979), no. 1, 83-93; MR 81a:30021]. (82b:30056)
- Šilín, A. P. On a boundary value problem with a shift on the open Riemann surfaces with an edge. (Russian. English summary) (82c:30065)
- Stanton, Charles M. On the closed ideals in $A(W)$. (82g:30079)
- Quasiconformal mappings and Riemann surfaces ★ Quasiconformal mappings and Riemann surfaces. (82a:30001)
- Symposium: Quasiconformal Mappings and Riemann Surfaces ★ Quasiconformal mappings and Riemann surfaces. (82a:30001)

30Gxx Generalized function theory

30G05 Non-Archimedean function theory [See also 12J25.]

secondary classifications:

- Fieseler, Karl-Heinz Zariski's Main Theorem für affinoid Kurven. (82b:32044)
- Kankurikar, R. S. On a generalization of Raghunathan's space of entire functions. I. (Italian summary) (82j:46093)
- van der Put, Marius La conjecture de la couronne en analyse complexe et p -adique. (82i:32042)
- Meromorphic differential equations over valued fields. (82m:34064)

30G10 Nonstandard function theory [See also 03H05.]

30G15 Topological function theory

secondary classifications:

- Marchisa, Giuseppe A sufficient condition for the continuity of the zeros of polynomials with coefficients in a topological field. (Italian. English summary) (82b:10070)
- 30G20 Generalizations of Bers or Vekua type (pseudanalytic, p -analytic, etc.)

- Ahmedov, Saidamir Ahmedović A quasilinear Carleman equation with fixed singular singularities of coefficients. I. (Russian) 82c:30068
- Bliev, N. K. Solvability of a generalized Cauchy-Riemann system. (Russian) 82f:30052
- Černý, I. V. See Kapišvili, O. O., 82a:30057
- Gaziev, A. See Mansurov, M., 82k:30051
- Hoang Din' Zung An integral representation of p -analytic functions with a logarithmically harmonic characteristic p . (Russian) 82j:30072
- Some integral representations of x^+y^- -analytic functions and formulas for their inversion. (Russian) 82k:30050
- Kapišvili, O. O. (with Černý, I. V.) A problem on the complex x -analytic potential of a system of annular coaxial discs. (Russian. English summary) 82a:30057
- Komin, Ralf Nonisolated singular points for generalized analytic functions. (Russian. Georgian and English summaries) 82c:30069
- Kulagina, M. F. The Riemann problem in the case of a countable set of contours in a class of generalized analytic functions. (Russian) 82b:30058
- Mansurov, M. (with Gaziev, A.) Integral of Cauchy type in the theory of analytic functions according to Vekua. I. (Russian) 82k:30051
- Mihailov, L. G. Reconstruction of a generalized analytic function from its real or imaginary part. (Russian. Tajik summary) 82k:30052
- Musaev, K. M. Approximation in the mean of generalized analytic functions. (Russian. Azerbaijani and English summaries) 82c:30070
- Niculescu, Cornelia Complex operators and associated differential equations. (Romanian. English summary) 82j:30073
- Otelbaev, M. O. On the theory of Vekua generalized analytic functions. (Russian) 82g:30077
- Tutschke, Wolfgang Boundary value problems for generalized analytic functions of several complex variables. 82f:30053

secondary classifications:

- Ahalaja, G. Ja. Riemann-Hilbert boundary value problem with discontinuous coefficients for generalized analytic functions. (Russian. Georgian and English summaries) (82g:30072)
- Bauer, Karl Wilhelm (with Ruscheweyh, Stephan) Differential operators for partial differential equations and function theoretic applications. (82d:35012)
- Colton, David L. Analytic theory of partial differential equations. (82j:35001)
- Dyn'kin, E. M. Constructive characterization of S. L. Sobolev and O. V. Besov classes. (Russian) (82k:46051)
- Goldschmidt, Bernd Eigenschaften der Lösungen elliptischer Differentialgleichungen erster Ordnung in der Ebene. (82d:35034)
- Hoang Dinh Dung Some applications of p -analytic functions in the theory of filtration in nonhomogeneous ground. (Russian) (82j:76079)
- Izuchi, Keiji (with Izuchi, Yuko) Flows and function algebras of generalized analytic functions. (82k:46079)
- Izuchi, Yuko See Izuchi, Keiji, (82k:46079)
- Kudrik, P. I. A representation of equations of infinitesimal bendings of convex surfaces. (Ukrainian. English and Russian summaries) (82m:53063)
- Kuliev, Dz. P. Continuous extensions of pseudoanalytical functions of several variables. (Russian. Azerbaijani and English summaries) (82k:32022)
- Kuskovskii, L. N. A generalized Cauchy-Riemann system with two independent complex variables. (Russian) (82g:32008)
- Mihailov, L. G. Some overdetermined systems of partial differential equations. (Russian) (82m:35111)
- Ruscheweyh, Stephan See Bauer, Karl Wilhelm, (82d:35012)

30G25 Discrete analytic functions

Šapovalenko, V. V. The invariant imbedding method for discrete quasiconformal mappings. (Russian) **82a:30058**

secondary classifications:

van der Put, Marius Schottky groups and Schottky curves. (82a:14007)

30G30 Other generalizations of analytic functions (including abstract-valued functions)

Dzagnidze, O. P. The inequalities of M. Riesz, A. Kolmogorov and A. Zygmund for functions of the Fedorov-Smirnov class. (Russian) **82f:30054**

Gheorghiu, Gh. Th. (with Marcu, Eleonora) Des propriétés des fonctions holomorphes nonholonomes. (Romanian summary) **82g:30078**

Marcu, Eleonora See Gheorghiu, Gh. Th., **82g:30078**

Stankov, D. K. See Toner, Toma V., **82h:30053**

Toner, Toma V. (with Stankov, D. K.) Singular points of generalized analytic functions. (Russian) **82h:30053**

secondary classifications:

Battle, Guy A. Generalized analytic functions and the two-dimensional Euclidean Dirac operator. (82k:81047)

Bezpal'cev, O. A. Generalized analytic continuation by symmetry. (Russian) (82c:30049)

Gierz, Gerhard (with Hofmann, Karl Heinrich; Keimel, Klaus; Lawson, Jimmie D.; Mislove, Michael W.; Scott, Dana S.) ★ A compendium of continuous lattices. (82h:06005)

Hofmann, Karl Heinrich See Gierz, Gerhard; et al., (82h:06005)

Keimel, Klaus See Gierz, Gerhard; et al., (82h:06005)

Lawson, Jimmie D. See Gierz, Gerhard; et al., (82h:06005)

Mislove, Michael W. See Gierz, Gerhard; et al., (82h:06005)

Nguyen-Xuan-Loc Singularities of locally analytic processes (with applications in the study of finely holomorphic and finely harmonic functions). (82a:60115)

Scott, Dana S. See Gierz, Gerhard; et al., (82h:06005)

30G35 Functions of hypercomplex variables and generalized variables

Buchanan, J. (with Gilbert, R. P.) The Hilbert problem for hyperanalytic functions. **82i:30068**

Finster, C. See Izvercian, P. N., **82m:30049**

Gibert, K. Ja. Riemann surfaces of a type of function of a dual variable. (Russian) **82b:30059**

Gilbert, R. P. See Buchanan, J., **82i:30068**

Grigorjan, S. A. On the singularities of generalized analytic functions. (Russian. Armenian summary) **82c:30053**

Izvercian, P. N. (with Finster, C.) H -holomorphic functions on polynomial algebras with a radical. (Romanian. German summary) **82m:30049**

Löhms, J. See Sorgsepp, L., **82m:30050**

McCarthy, Patrick J. Ultragenralised complex analysis. **82c:30072**

Neagu, Ana Maria See Roşculeţ, Marcel, **82k:30054**

Roşculeţ, Marcel (with Neagu, Ana Maria) Fonctions quasi monogènes sur des algèbres à radical. (Romanian summary) **82k:30054**

Sorgsepp, L. (with Löhms, J.) Binary and ternary sedenions. **82m:30050**

Tret'jakov, V. A. Some properties of mappings in space associated with the algebra of bicomplex numbers in modulus. (Russian) **82b:30060**

On the properties of some elementary functions that are defined on the algebra of bicomplex numbers. (Russian) **82i:30069**

secondary classifications:

Černjavskii, A. G. Quasianalytic analogues of some properties of harmonic functions. (Russian. Armenian summary) (82j:31008)

Gilezan, Koriolan Équations fonctionnelles pseudo-bouliennes généralisées du deuxième ordre. (Serbo-Croatian summary) (82f:35192)

Šalić, M. Application of quaternion functions for solving approximate fluid flow equations. (82j:76027)

30G99 None of the above, but in this section

Gol'dštejn, V. M. Extension of functions with first generalized derivatives from plane domains. (Russian) **82c:30070**

secondary classifications:

Bruna, Joaquim An extension theorem of Whitney type for non-quasi-analytic classes of functions. (82e:58024)

Černjaev, A. P. Discovery of solutions of source-sink type for the potential of generalized Cauchy-Riemann systems of a certain type. (Russian) (82m:35014)

Jafar, D. R. A counterexample to a uniqueness theorem for analytic operator-valued functions. (Russian. English summary) (82f:47027)

30H05 Spaces and algebras of analytic functions [See also 32E25, 46Exx, 46J15.]

Agarwal, S. K. See Mal, Dingur, **82j:30075**

Agranovskii, M. L. Spaces of functions in the disc invariant with respect to multiplication on z and conformal shifts. (Russian) **82m:30051**

Anderson, Stephen L. Green's function, Jensen measures, and bounded point evaluations. **82k:30055**

Burbea, Jacob The Bergman projection on weighted norm spaces. **82b:30061**

Burkholder, D. L. Boundary value estimation of the range of an analytic function. **82c:30071**

Cima, Joseph A. (with Wogen, W. R.) On isometries of the Bloch space. **82m:30052**

Džanašija, G. A. (with Ozišvili, T. S.) The uniqueness of the orthogonal decomposition of function rings on a circle. (Russian) **82a:30059**

Eremenko, A. E. Counting functions of sequences of a -points for functions that are holomorphic in a disc. (Russian) **82f:30055**

Gi'ltudinova, A. Ja. Theorems of A. Ostrowski's type and invariant subspaces of analytic functions. (Russian) **82k:30056**

Jensen, Christian U. Propriétés homologiques et logiques des anneaux de fonctions entières. (English summary) **82k:30057**

Korenblum, Boris Cyclic elements in some spaces of analytic functions. **82j:30074**

Lappan, Peter (with Rubel, Lee A.) Some orderings induced by spaces of analytic functions. **82b:30054**

Luecking, Daniel H. Inequalities on Bergman spaces. **82c:30072**

Mal, Dingur (with Agarwal, S. K.) Space of a class of meromorphic functions. **82j:30075**

Ozišvili, T. S. See Džanašija, G. A., **82a:30059**

Rašković, Miodrag On existence of expansion of a complex function. **82d:30051**

Rubel, Lee A. See Lappan, Peter, **82b:30054**

Šamojan, F. A. Division theorems and closed ideals in algebras of analytic functions with a majorant of finite growth. (Russian. Armenian and English summaries) **82c:30073**

Srivastava, Rajiv Kumar On a class of entire Dirichlet series. **82j:30076**

Stanton, Charles M. On the closed ideals in $A(W)$. **82g:30079**

Volyne, I. A. Comparison of metrics in a space of analytic functions. (Russian) **82c:30074**

Wogen, W. R. See Cima, Joseph A., **82m:30052**

secondary classifications:

Abikoff, William On the boundary behavior of functions in the spherical Dirichlet class. (82j:30027)

Ahador, R. A. On the convergence of sequences of linear operators in a space of functions that are analytic in the disc. (Russian. Azerbaijani and English summaries) (82k:47043)

Anderson, James Milne (with Rochberg, R. H.) Toeplitz operators associated with subalgebras of the disk algebra. (82j:47041)

Andrievskii, V. V. Constructive characterization of functions of Hölder classes on continua without exterior zero angles. (Russian. English summary) (82j:30051)

Boland, Philip J. (with Dineen, Sean) Holomorphy on spaces of distribution. (82i:46065)

Borovskii, Ju. V. On closed ideals in an algebra of entire functions. (Russian) (82i:46084)

Burbea, Jacob A Dirichlet norm inequality and some inequalities for reproducing kernel spaces. (82j:30014)

Chollet, Anne-Marie Carleson sets in C^n , $n < 1$. (82g:32020)

Dineen, Sean See Boland, Philip J., (82i:46065)

Džibajev, M. M. Characteristic of closed linear hulls of two families of incomplete systems of analytic functions. (Russian) (82d:30007)

Eremin, M. S. Equivalence in A_E of an integro-differential operator of a certain type and Euler's operator. (Russian) (82m:47036)

Gerber, Eric Alan (with Weiss, Max L.) Parts in H^∞ with homeomorphic analytic maps. (82k:46081)

Globočnik, Josip Fourier coefficients of the Rudin-Carleson extensions. (82d:46076)

Grigorjan, S. A. Algebras generated by functions that are analytic in the Arens-Singer sense. (Russian. Armenian summary) (82m:46055)

Guillory, Carroll (with Sarason, Donald) Division in $H^\infty + C$. (82j:46066)

Järvi, Pentti Meromorphic functions on certain Riemann surfaces with small boundary. (82k:30044)

Kacnel'son, V. E. When is L^2 the direct sum of H^2 and uH^2_+ ? (Russian) (82m:42013)

Kirjutenko, Ju. A. Operators that commute with integration in spaces of functions analytic in simply connected domains. (Russian) (82f:47041)

Klouth, Richard Abschätzungen für verallgemeinerte Schwarzsche Derivierte in linear-invarianten Funktionenfamilien. [Estimations for generalized Schwarz derivatives in linear-invariant families of functions] (82k:30015)

Korobeinik, Ju. F. Representative systems. (Russian) (82b:46006)

A functional equation. II. (Russian) (82d:30022)

Krasičkov-Ternovskii, I. F. Spectral synthesis on systems of convex domains. Extension of the synthesis. (Russian) (82d:46058)

Maddox, Ivor J. Schwarz' lemma and convergent series. (82c:30028)

Musiela, Julian Some problems concerning modular spaces of analytic functions. (82f:46025)

Nakazi, Takahiko A note on the factorization of operator-valued functions. (82c:47019)

Nanda, Sudarsan (with Srivastava, P. D.; Nayak, K. C.) Certain subspaces of a Fréchet space. (82b:46040)

Napalkov, V. V. Discrete sufficient sets in some spaces of entire functions. (Russian) (82b:46026)

Nayak, K. C. See Nanda, Sudarsan; et al., (82b:46040)

Nikol'skii, N. K. ★ Лекции об операторе свёртки. (Russian) [Lectures on the shift operator] (82f:47013)

Oskolkov, V. A. Necessary and sufficient conditions for the quasiexponential basis property of certain systems of regular functions. (Russian) (82j:30005)

Patwardhan, M. D. Bornological properties of the space of integral functions. (82b:46041)

von Renteln, Michael Zur Idealstruktur der Algebren F^+ und H^∞ . (82a:46056)

A simple constructive proof of an analogue of the corona theorem. (82b:46073)

Richards, L. Karamata-type operators on the space of uniformly convergent power series. (82f:30003)

Rochberg, R. H. See Anderson, James Milne, (82j:47041)

Sarason, Donald See Guillory, Carroll, (82j:46066)

Savoyant, Michel Limites de suites bornées de polynômes. (82c:30041)

Silbermann, Bernd Some remarks on the asymptotic behavior of Toeplitz determinants. (82j:47048)

- Širokov, N. A. On the modulus of boundary values of analytic functions of class A_n^* . (Russian. English summary) (82j:30043)
- Srivastava, P. D. See Nanda, Sudarsan; et al., (82h:46040)
- Stray, Arne Vitushkin's method and some problems in approximation theory. (82g:30070)
- Tkachenko, V. A. Spectral theory in spaces of analytic functionals for operators generated by multiplication by the independent variable. (Russian) (82f:47046)
- Vinogradov, S. A. Multiplicative properties of power series with a sequence of coefficients from \mathbb{P} . (Russian) (82a:30003)
- Weiss, Max L. See Gerber, Eric Alan, (82a:46081)
- Wolniewicz, Tomasz M. On the Banach-Mazur distance between annulus algebras. (Russian summary) (82h:46074)
- Yamashita, Shinji On hyperbolic Hardy classes. (82h:30036)

31-XX POTENTIAL THEORY (For probabilistic potential theory, see 60J45.)

31-01 Elementary exposition, textbooks

- Hayman, Walter Kurt (with Kennedy, P. B.) ★Субгармонические функции. Том 1. (Russian) [Subharmonic functions. Vol. 1] 82a:31001
- Kennedy, P. B. See Hayman, Walter Kurt, 82a:31001
- (Solomencev, E. D.) See Hayman, Walter Kurt; et al., 82a:31001
- (Vavilov, V. V.) See Hayman, Walter Kurt; et al., 82a:31001

secondary classifications:

- Feyel, Denis (with de la Pradelle, Arnaud) ★Ejercicios sobre las funciones analíticas. (Spanish) [Exercises on analytic functions. (82m:30001)]
- (Lepa, Eugene) See Maurin, Krzysztof, (82c:00003)
- Maurin, Krzysztof ★Analysis. Part II. (82c:00003)
- de la Pradelle, Arnaud See Feyel, Denis, (82m:30001)
- (Romero Ros, Emilio) See Feyel, Denis; et al., (82m:30001)

31-02 Advanced exposition (research surveys, monographs, etc.)

- Doob, J. L. Classical potential theory and Brownian motion. 82h:31001
- Werner, John ★Potential theory. 82h:31001
- Freiberg ★Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] 82g:31001
- Geophysics ★Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] 82g:31001
- Modern potential theory as a foundation for the inverse problem in geophysics ★Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] 82g:31001
- Summer School: Modern Potential Theory as a Foundation for the Inverse Problem in Geophysics ★Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] 82g:31001

secondary classifications:

- (Elmer, Leo) See Hua, Luo Geng, (82c:32032)
- (Graev, M. I.) See Hua, Luo Geng, (82c:32032)
- Hua, Luo Geng ★Harmonic analysis of functions of several complex variables in the classical domains. (82c:32032)
- (Koranyi, Adam) See Hua, Luo Geng, (82c:32032)

31-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (Euler, Leonhard) See Kirsanov, V. S., (82h:01030)
- Kirsanov, V. S. The evolution of L. Euler's concept of potential. (Russian) (82h:01030)
- (Kunugui, Kinjirō) See Ninomiya, Nobuyuki, (82g:01065)
- Netuka, Ivan (with Vesely, Jiří) The Dirichlet problem and the Keldyš theorem. (Czech) (82f:01126)
- Ninomiya, Nobuyuki Professor Kinjirō Kunugui's works on potential theory. (82g:01065)
- Vesely, Jiří See Netuka, Ivan, (82f:01126)

31-04 Explicit machine computation and programs (not the theory of computation or programming)

31-06 Proceedings, conferences, etc.

secondary classifications:

- Freiberg ★Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] (82g:31001)
- Geophysics ★Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] (82g:31001)
- Modern potential theory as a foundation for the inverse problem in geophysics ★Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik.

(German) [Modern potential theory as a foundation for the inverse problem in geophysics] (82g:31001)

Summer School:

Modern Potential Theory as a Foundation for the Inverse Problem in Geophysics ★Die moderne Potentialtheorie als Grundlage des inversen Problems in der Geophysik. (German) [Modern potential theory as a foundation for the inverse problem in geophysics] (82g:31001)

31Axx Two-dimensional theory

31A05 Harmonic, subharmonic, superharmonic functions

- Anandam, Victor (with Brelot, Marcel) On a generalized logarithmic kernel and its potentials. 82g:31002
- Subharmonic functions outside a compact set in \mathbb{R}^n . 82h:31002
- Boghossian, Artin Tangential approximation of continuous functions on open sets. 82j:31001
- Brelot, Marcel See Anandam, Victor, 82g:31002
- Burckel, R. B. A strong converse to Gauss's mean-value theorem. 82c:31001
- Chui, Charles K. (with Roberts, George A.) An interpolation formula for harmonic functions on the set of integers. 82h:31001
- Gabov, S. A. On the theory of harmonic angular potential. (Russian. English summary) 82h:31002
- Johnston, Elgin H. The boundary modulus of continuity of harmonic functions. 82a:31002
- Roberts, George A. See Chui, Charles K., 82h:31001
- Schposjan, L. A. A generalization of a theorem of Littlewood. (Russian. Armenian and English summaries) 82f:31001
- Shirali, Satish Inverse of the Laplacian on a plane domain with corners. 82h:31003
- Yamashita, Shinji Dirichlet-finite functions and harmonic majorants. 82m:31001

secondary classifications:

- Caffarelli, Luis A. (with Kinderlehrer, David) Potential methods in variational inequalities. (82h:49009)
- Dont, Miroslav On the continuity of heat potentials. (Czech summary) (82h:35043)
- Fleishman, Bernard A. (with Mahar, Thomas J.) A minimum principle for superharmonic functions subject to interface conditions. (82g:35016)
- Fuglede, Bent Asymptotic paths for subharmonic functions and polygonal connectedness of fine domains. (82h:31006)
- Garcia-Cuerva, José Weighted H^p spaces. (82a:42018)
- Huigol, R. R. Relation of the conjugate harmonic functions to $f(z)$ in cylindrical polar coordinates. (82h:30044)
- Januskauskas, A. I. On Lewy's theorem on Hessian zeros of a harmonic function. (Russian) (82c:35015)
- Kaufman, Robert P. (with Wu, Jang Mei G.) Removable singularities for analytic or subharmonic functions. (82c:30048)
- Kinderlehrer, David See Caffarelli, Luis A., (82h:49009)
- Mahar, Thomas J. See Fleishman, Bernard A., (82g:35016)
- Rippon, P. J. On subharmonic functions which satisfy a growth restriction. (82i:30002)
- Sirinbekov, M. Hartogs compacta of holomorphy. (Russian) (82j:32028)
- Srivastava, G. S. On the proximate order and proximate type of a subharmonic function. (82h:30025)
- Wu, Jang Mei G. See Kaufman, Robert P., (82c:30048)
- Yoshida, Hidenobu A boundedness criterion for subharmonic functions. (82h:31007)

31A10 Integral representations

- Bear, H. S. Approximate identities and pointwise convergence. 82e:31001
- Gabov, S. A. Applications of angular potential. On the solution of a problem of Poincaré. (Russian) 82j:31002

secondary classifications:

- Anandam, Victor On the integral representation of superharmonic functions in \mathbb{R}^n . (82e:31006)

31A15 Potentials and capacity, harmonic measure, extremal length [See also 30C85.]

- Acker, Andrew Errata: "Free boundary optimization—a constructive iterative method" [Z. Angew. Math. Phys. 30 (1979), no. 6, 885–900; MR 81k:31006]. 82h:31002
- Levitan, B. M. Almost periodic behavior of potentials with infinite zones. (Russian) 82i:31001
- Tamrazov, P. M. Variational problems of logarithmic potential theory. (Russian) 82c:31002
- A. A. Gončar's extremal problem on capacities of condensers, and the method of mixing of charges. (Russian) 82i:31002
- Zaharjan, V. S. Boundary properties of the Green type potential. (Russian) 82h:31003

secondary classifications:

- Abikoff, William On the boundary behavior of functions in the spherical Dirichlet class. (82j:30027)
- Anandam, Victor (with Brelot, Marcel) On a generalized logarithmic kernel and its potentials. (82g:31002)
- Brelot, Marcel See Anandam, Victor, (82g:31002)
- Fraenkel, L. E. A lower bound for electrostatic capacity in the plane. (82i:78012)
- Fuchs, W. H. J. On Chebyshev approximation on sets with several components. (82j:41024)
- Hough, D. M. Exact formulae for certain integrals arising in potential theory. (82f:65020)

Navojan, V. H. On the continuity of the conformal capacity of a three-dimensional condenser. (Russian) (82j:31007)

Øksendal, Bernt Sets of harmonic measure zero. (82k:30028)

Zorin, N. V. Estimates of capacities and energies in capacitor reconstruction. (Russian) (82c:30029)

Logarithmic potential and other monographs ★ *The logarithmic potential and other monographs.* (82j:01081)

31A20 Boundary behavior (theorems of Fatou type, etc.)

Berberman, S. L. Boundary properties of subharmonic functions that generate normal families on subgroups of automorphisms of the unit disc. (Russian. Armenian and English summaries) (82c:31003)

Mačavariani, I. D. Lower and upper nontangential limits of the logarithmic potential of a dual distribution. (Russian) (82d:31001)

Rahimov, R. M. Direct and inverse estimates for the derivative of the potential of a simple layer. (Russian. Tajiki summary) (82j:31003)

secondary classifications:

Kolesnikov, S. V. Special boundary points of analytic functions. (Russian) (82c:30038)

Rippon, P. J. On subharmonic functions which satisfy a growth restriction. (82i:30002)

Wu, Jang Mei G. L^p -densities and boundary behaviors of Green potentials. (82b:31012)

Zverev, S. M. The method of metaharmonic potentials in hydroelasticity problems. (Russian. English summary) (82c:73033)

31A25 Boundary value and inverse problems

Hersch, Joseph Sur un problème de potentiel avec conditions aux limites mixtes: une conjecture de A. Acker et sa démonstration à l'aide de problèmes auxiliaires à une dimension. (English summary) (82c:31002)

Hsiao, George C. See Wendland, Wolfgang L.; et al., 82c:31003

Nayar, B. M. Neumann function for the sphere. I, II. (82j:31004)

Stephan, E. See Wendland, Wolfgang L.; et al., 82c:31003

Wendland, Wolfgang L. (with Stephan, E.; Hsiao, George C.) On the integral equation method for the plane mixed boundary value problem of the Laplacian. (82c:31003)

secondary classifications:

Berenstein, Carlos Alberto An inverse spectral theorem and its relation to the Pompeiu problem. (82b:35031)

Colli Franzone, P. (with Magenes, Enrico) On the inverse potential problem of electrocardiology. (82c:35079)

Homentcovski, Dorel On the determination of certain plane parallel potential fields with mixed boundary conditions. (Romanian. French summary) (82d:78013)

Magenes, Enrico See Colli Franzone, P., (82c:35079)

Serman, D. I. On some types of singular integral equations occurring in applications. (82i:45003)

Vasil'ev, B. A. A plane stationary problem of the theory of heat conduction for polygonal domains with a boundary condition of the third kind. (Russian) (82m:35015)

Želuhin, V. S. An iteration method for solving the Dirichlet problem for a biharmonic equation in polar coordinates. (Russian) (See 82b:76001)

31A30 Biharmonic, polyharmonic functions and equations, Poisson's equation

Coffman, C. V. (with Duffin, Richard J.) On the structure of biharmonic functions satisfying the clamped plate conditions on a right angle. (82c:31004)

Duffin, Richard J. See Coffman, C. V., 82c:31004

Milewski, Jan (with Wachnicki, Eugeniusz) Solution d'un problème aux limites pour l'équation biharmonique. (82a:31003)

Nakai, Mitsuru (with Sario, Leo) Duffin's function and Hadamard's conjecture. (82d:31002)

Rosser, J. Barkley Majorization formulas for a biharmonic function of two variables. (82c:31005)

Sändig, Anna-Margarete Das Maximum-Prinzip vom Miranda-Agmon-Typ für Lösungen der biharmonischen Gleichung in einem Rechteck. (82d:31003)

Sario, Leo See Nakai, Mitsuru, 82d:31002

Sten'kin, V. V. Solution of a biharmonic equation in an angular region by the splicing method. (Russian) (82c:31004)

Wachnicki, Eugeniusz See Milewski, Jan, 82a:31003

secondary classifications:

Berekašvili, R. A. See Ruhadze, A. K., (82g:73029)

Blum, H. (with Rannacher, R.) On the boundary value problem of the biharmonic operator on domains with angular corners. (82a:35022)

Grimaldi Piro, A. (with Ragnedda, F.) On a Cauchy problem for the bicaloric operator with initial data in subspaces of BMO. (Italian. English summary) (82m:35066)

Mihailov, V. N. Plane problem of the theory of elasticity in multiply-connected domains with cyclic and mirror symmetry. (82b:73005)

Ragnedda, F. See Grimaldi Piro, A., (82m:35066)

Rannacher, R. See Blum, H., (82a:35022)

Ruhadze, A. K. (with Berekašvili, R. A.) On a generalized Almansi problem. (Russian. Georgian and English summaries) (82g:73029)

31A35 Connections with differential equations

Nakai, Mitsuru The range of Picard dimensions. (82c:31006)

Stoica, Lucretiu On the hyperharmonic functions associated with a degenerated elliptic operator. (82b:31003)

Swanson, Robert See Terras, Rihō, 82a:31005

Terras, Rihō (with Swanson, Robert) Image methods for constructing Green's functions and eigenfunctions for domains with plane boundaries. (82a:31005)

Zayed, Ahmed I. Hyperfunctions as boundary values of generalized axially symmetric potentials. (82f:31002)

secondary classifications:

Kelings, John A. See Staples, Phillip O., (82b:35127)

Staples, Phillip O. (with Kelings, John A.) A characterization of solutions to a perturbed Laplace equation. (82b:35127)

31A99 None of the above, but in this section

secondary classifications:

Svanadze, M. Z. Asymptotic estimates for integrals of potential type on infinite manifolds. (Russian. Georgian and English summaries) (82c:73012)

31Bxx Higher-dimensional theory

31B05 Harmonic, subharmonic, superharmonic functions

Aikawa, Hiroaki On the behavior at infinity of nonnegative superharmonic functions in a half space. (82g:31003)

Armitage, David H. A Phragmén-Lindelöf theorem for subharmonic functions. (82c:31004)

Normal limits, half-spherical means and boundary measures of half-space Poisson integrals. (82g:31004)

Hyperplane mean values of positive superharmonic functions. (82b:31004)

A Nevanlinna theorem for superharmonic functions in half-spaces, with applications. (82b:31005)

Benedicks, Michael Positive harmonic functions vanishing on the boundary of certain domains in \mathbb{R}^n . (82b:31004)

Bui Huy Qui (with Mizuta, Yoshihiro) On the existence of harmonic functions in L^p . (82b:31005)

Dahlberg, Björn E. J. Weighted norm inequalities for the Lusin area integral and the nontangential maximal functions for functions harmonic in a Lipschitz domain. (82f:31003)

Eremenko, A. E. Letter to the editors: "An inequality for subharmonic functions" [Teor. Funkcii Funkcional. Anal. i Prilozhen. No. 29 (1978), 36-40; MR 81b:31005]. (Russian) (82i:31003)

Fabes, Eugene B. (with Neri, Umberto) Dirichlet problem in Lipschitz domains with BMO data. (82g:31005)

Favard, S. Ju. Reduction sets for subharmonic functions of completely regular growth. (Russian) (82c:31004)

Fichera, Gaetano Asymptotic behavior of an electrical field around singular points of the conducting surface. (Russian) (82i:31004)

Singularities of 3-dimensional potential functions at the vertices and at the edges of the boundary. (82c:31007)

Fuglede, Bent Asymptotic paths for subharmonic functions and polygonal connectedness of fine domains. (82b:31006)

Furuta, Yoshito See Hoshi, Seiichi, 82m:31002

Hoshi, Seiichi (with Furuta, Yoshito) On special functions of quaternion functions. (82m:31002)

Jakovlev, V. I. The connection between the growth of a subharmonic function and the distribution of the associated measure. (Russian) (82m:31003a)

On the connection between the growth of the mean values of a subharmonic function and the distribution of the associated measure. (Russian) (82m:31003b)

Kolokofnikov, A. S. Differences of subharmonic functions with masses that are divided with respect to spherical functions. (Russian) (82j:31005)

Kuran, Ū. Some extension theorems for harmonic, superharmonic and holomorphic functions. (82a:31006)

Loeb, Peter A. An almost everywhere regular, metrizable boundary supporting the maximal representing measures for bounded and quasibounded harmonic functions. (82b:31006)

Logunova, O. M. Analytic continuation of the sum of Laplace series. (Russian) (82b:31007)

Mazzarella, Francesco A characteristic property of harmonic functions. (Italian) (82i:31005)

Mizuta, Yoshihiro See Bui Huy Qui, 82b:31005

Neri, Umberto See Fabes, Eugene B., 82g:31005

Rippon, P. J. A boundary estimate for harmonic functions. (82m:31004)

Rudin, Walter Tauberian theorems for positive harmonic functions. (82a:31007)

Yoshida, Hidenobu A boundedness criterion for subharmonic functions. (82b:31007)

secondary classifications:

Anandam, Victor Subharmonic functions outside a compact set in \mathbb{R}^n . (82k:31002)

Chung, Lung Ock (with Sario, Leo; Wang, Cecilia) Harmonic L^p functions on the Poincaré N -ball. (82k:31010)

Eremenko, A. E. The growth of entire and subharmonic functions on asymptotic curves. (Russian) (82c:30039)

Estrada, R. (with Kanwal, R. P.) Applications of distributional derivatives to wave propagation. (82a:35018)

Freedman, Willi (with Kersten, Heinrich) A constructive approximation theorem for the oblique derivative problem in potential theory. (82j:35007)

Jević, M. Spaces defined by the operators L_n^* and J_n^* . (Serbo-Croatian. English summary) (82f:30042)

Kanwal, R. P. See Estrada, R., (82a:35018)

- Karpulkin, V. N. The number of complement components for the level hypersurface of a harmonic polynomial. (Russian. English summary) (82m:14026)
- Kersten, Heinrich See Freeden, Willi, (82j:35007)
- Kytmanov, A. M. Exact calculation of an integral of Martinelli-Bochner type in a ball in \mathbb{C}^n . (Russian) (82j:32016)
- Lyons, T. J. Finely holomorphic functions. (82d:31011a)
- A theorem in fine potential theory and applications to finely holomorphic functions. (82d:31011b)
- Sario, Leo See Chung, Lung Ock; et al., (82k:31010)
- Wang, Cecilia See Chung, Lung Ock; et al., (82k:31010)
- Watson, N. A. The asymptotic behaviour of temperatures and subtemperatures. (82f:31004)
- Yamashita, Shinji Dirichlet-finite functions and harmonic majorants. (82m:31001)

31B10 Integral representations

- Anandam, Victor On the integral representation of superharmonic functions in \mathbb{R}^n . (82c:31008)
- Goman, O. (with Popov, V. V.) A new method of using the relationship between p -harmonic and analytic functions for a solution to the problems of potential theory. (Russian. English summary) 82c:31009
- Grat, I. M. Integral solutions of the Laplace equation. (Russian) 82c:31010
- Lakshmanan, Vimala Integral representation of superharmonic functions of finite order in \mathbb{R}^n . 82k:31005
- Novickii, M. V. Completely subharmonic functions in the domain $D = (0, 1) \times \mathbb{R}^m$, $m \geq 1$. (Russian) 82k:31006
- Popov, V. V. See Goman, O. 82c:31009
- Sansò, Fernando Internal collocation. (Italian summary) 82i:31006
- Sivakesan, P. On a generalized Newtonian potential. 82k:31007
- Srivastava, G. S. See Vaish, Satendra Kumar, 82b:31008
- Vaish, Satendra Kumar (with Srivastava, G. S.) On the mean values of an entire function and its derivatives. 82b:31008

secondary classifications:

- Armitage, David H. Normal limits, half-spherical means and boundary measures of half-space Poisson integrals. (82g:31004)
- Avci, Yusuf Characterization of shell domains by quadrature identities. (82f:30041)
- Eremenko, A. E. Letter to the editors: "An inequality for subharmonic functions" [Teor. Funktsii Funktsional. Anal. i Prilozhen. No. 29 (1978), 36–40; MR 81b:31005]. (Russian) (82j:31003)
- Kartan, L. M. Hadamard convolutions in a polydisc. (Russian) (82c:32006)
- Okikiola, George Olatunmbi ★Special integral operators. Vol. I. (82d:44002)

31B15 Potentials and capacities, extremal length

- Dehen, Danièle See Mastrangelo, M., 82g:31006
- Derfel, N. A. Coverings of finite multiplicity. (Russian) 82c:31011
- Hamann, Uwe Eigenschaften von Potentialen bezüglich elliptischer Differentialoperatoren. 82d:31005
- Hogh, Hans-Jürgen (with Wildenhain, Günther) Eine Bemerkung zum Balayage-Prinzip für Riesz-Kerne. 82d:31006
- Kurokawa, Takahide On the local behavior of potentials in certain classes. 82c:31004
- Levickii, B. E. Decrease of a functional in symmetrization. (Russian) 82m:31005
- Mastrangelo-Dehen, Michèle Différentiabilité fine et différentiabilité sur des compacts. 82j:31008
- (with Dehen, Danièle) Les p -topologies en théorie du potentiel. (English summary) 82g:31006
- Mattila, Pertti Integral geometric properties of capacities. 82h:31008
- Navojan, V. H. On the continuity of the conformal capacity of a three-dimensional condenser. (Russian) 82c:31007
- Wildenhain, Günther See Hogh, Hans-Jürgen, 82d:31006
- Wohlhauser, Alfred Les applications analytiques de l'espace qui conservent les angles solides. (English summary) 82h:31009

secondary classifications:

- Aikawa, Hiroaki On the behavior at infinity of nonnegative superharmonic functions in a half space. (82g:31003)
- Baxter, J. R. Inequalities for potentials of particle systems. (82j:81065)
- Dahlberg, Björn E. J. Weighted norm inequalities for the Lusin area integral and the nontangential maximal functions for functions harmonic in a Lipschitz domain. (82f:31003)
- Dellacherie, Claude Capacities and analytic sets. (82j:54085)
- Vazquez, Juan Luis (with Véron, Laurent) Removable singularities of some strongly nonlinear elliptic equations. (82b:35059)
- Véron, Laurent See Vazquez, Juan Luis, (82b:35059)

31B20 Boundary value and inverse problems

- Aleksidze, M. A. On a generalization of the Stokes theorem. (Russian) 82b:31009
- Alimov, S. A. A boundary value problem. (Russian) 82j:31006
- Brittin, Wesley E. Mixed boundary value problems for concentric cylinders—an algebraic operator formulation. 82i:31008
- Gardiner, S. J. The Dirichlet and Neumann problems for harmonic functions in half-spaces. 82m:31006
- Gusman, S. Ja. The jump problem for holomorphic forms and composite potentials on compact locally Euclidean spaces. (Russian) 82m:31007
- Kibirev, V. V. A boundary value problem for a system of harmonic functions. (Russian) 82c:31012

Nguyễn Thị's Hô'p Conditions de prolongement harmonique et ses applications.

82j:31009

Weinert, M. Solution of Poisson's equation: beyond Ewald-type methods. 82m:31008

secondary classifications:

- Alihanjan, R. A. A mixed boundary value problem for the Laplace equation in an infinite multiply connected domain. (Russian. Armenian and English summaries) (82c:35030)
- Bezuavili, Ju. A. See Burčuladze, T. V., (82k:73078)
- Brosowski, Bruno An application of Korovkin's theorem to certain partial differential equations. (82f:46005)
- Burčuladze, T. V. (with Bezuavili, Ju. A.) Three-dimensional dynamic problems of the conjugate theory of thermoelastic diffusion. (Russian) (82k:73078)
- Burov, V. A. (with Gorjunov, A. A.) Inverse problem of scalar diffraction. (Russian) (82d:78017)
- Gorjunov, A. A. See Burov, V. A., (82d:78017)
- Itô, Seizô Boundary value problems for compressed flow. (Japanese) (82h:35088)
- Jó, István Some applications of a theorem of S. Banach. (Russian) (82f:35143)
- Köbel, Klaus Eine inverse Aufgabe für parabolische Potentiale. (82h:35096)
- Krasnov, I. P. An integral equation of potential theory. (Russian) (82m:45004)
- Kress, Rainer On the limiting behaviour of solutions to boundary integral equations associated with time harmonic wave equations for small frequencies. (82m:45026)
- Nagel, Alexander (with Stein, Elias M.; Wainger, Stephen) Boundary behavior of functions holomorphic in domains of finite type. (82k:32027)
- Petrovskaja, M. S. Solution of continuous and discrete boundary value problems. (Russian. English summary) (82m:86008)
- Pierre, Michel Problèmes d'évolution avec contraintes unilatérales et potentiels paraboliques. (82g:35062)
- Sansò, Fernando Molodensky's problem in gravity space: a review of the first results. (82k:86008)
- Stein, Elias M. See Nagel, Alexander; et al., (82k:32027)
- Wainger, Stephen See Nagel, Alexander; et al., (82k:32027)
- Witsch, Karl J. A uniqueness result for the geodesic boundary problem. (82j:58106)

31B25 Boundary behavior

- Dahlberg, Björn E. J. Approximation of harmonic functions. (French summary) 82k:31010
- González, Luis (with Keller, Eckart; Wildenhain, Günther) Über das Randverhalten des Poisson-Integrals der polyharmonischen Gleichung. 82g:31007
- Keller, Eckart See González, Luis; et al., 82g:31007
- Kral, Josef ★Integral operators in potential theory. 82b:31010
- Mizuta, Yoshihiro On the behavior at infinity of Green potentials in a half space. 82b:31011
- Netuka, Ivan The Dirichlet problem for harmonic functions. 82c:31005
- Rjabogin, A. K. Boundary values of conjugate harmonic functions of several variables. (Russian) 82d:31007
- Wildenhain, Günther See González, Luis; et al., 82g:31007
- Wu, Jang Mei G. L^p -densities and boundary behaviors of Green potentials. 82b:31012

secondary classifications:

- Ancona, Alano Principe de Harnack à la frontière et problèmes de frontière de Martin. (82a:31014)
- Fabes, Eugene B. (with Neri, Umberto) Dirichlet problem in Lipschitz domains with BMO data. (82g:31005)
- Levickii, B. E. Decrease of a functional in symmetrization. (Russian) (82m:31005)
- Neri, Umberto See Fabes, Eugene B., (82g:31005)
- Taylor, John Christopher Fine and admissible convergence for the unit ball in \mathbb{C}^n . (82c:32043)

31B30 Biharmonic and polyharmonic equations and functions

- (Amaranath, T.) See Jaswon, M. A.; et al., 82m:31010
- Arzanyan, I. S. Quasianalytic solutions of the biharmonic equation. (Russian) 82g:31008
- Chung, Lung Ock (with Sario, Leo; Wang, Cecilia) Quasiharmonic L^p functions and biharmonic degeneracy. 82c:31006
- Dümmel, Siegfried Über ein inverses Problem für polyharmonische Potentiale. 82d:31008
- Fuglede, Bent On a direct method of integral equations for solving the biharmonic Dirichlet problem. (German and Russian summaries) 82m:31009
- Jaswon, M. A. (with Shidfar, A.) On a differential equation of Bergman and Schiffer. 82m:31010
- Kravec, V. V. On the problem of being a basis property, for a system of metaharmonic functions in L_2 . (Russian) 82d:31009
- Martynenko, M. D. (with Šipka, I. G.) Analytic extension of metaharmonic potentials. (Russian. English summary) 82d:31010
- (Nigam, S. D.) See Jaswon, M. A.; et al., 82m:31010
- Pélin, B. K. Basic formula for representation of a subharmonic function in the general case of arbitrary entire order in the whole domain. (Russian) 82b:31013
- Sario, Leo See Chung, Lung Ock; et al., 82c:31006
- Sato, Hajime La classe de Hardy H^p de fonctions bi-harmoniques sur $\mathbb{R}_+^{n+1} \times \mathbb{R}_+^{n+1}$; sa caractérisation par les transformations de Riesz. (English summary) 82a:31008
- Shidfar, A. See Jaswon, M. A., 82m:31010
- Šipka, I. G. See Martynenko, M. D., 82d:31010
- Tarnowski, Stanisław On a certain problem concerning the polyharmonic polynomials. 82j:31007
- Tavhelidze, I. N. Solutions of polyharmonic equations with Dirichlet boundary conditions. (Russian) 82c:31007
- Wachnicki, Eugeniusz The Green function for p -harmonic Dirichlet problem in half space. 82m:31011
- Wang, Cecilia See Chung, Lung Ock; et al., 82c:31006

Wildenhain, Günther Über die Darstellbarkeit polyharmonischer Funktionen in der Kugel. **82g:31009**

secondary classifications:

Gaveau, Bernard Valeurs au bord des fonctions harmoniques ou holomorphes et de leurs dérivées. I. (English summary) **(82e:32007)**

Hayman, Walter Kurt An approximation theorem with applications to Iversen's theorem. **(82g:30052)**

(Marcus, Solomon) See Nicolescu, Miron, **(82f:01185)**

Maz'ja, V. G. (with Plamenevskii, B. A.) Pseudoanalyticity of the solutions of a perturbed polyharmonic equation in \mathbb{R}^n . (Russian) **(82d:35043)**

Nakai, Mitsuru (with Sario, Leo) Existence relations between harmonic and biharmonic Green's functions. (Italian summary) **(82f:30047)**

Nicolescu, Miron ★Opera matematică. (Romanian) [Mathematical works] **(82f:01185)**

Plamenevskii, B. A. See Maz'ja, V. G., **(82d:35043)**

Sario, Leo See Nakai, Mitsuru, **(82f:30047)**

Skriabin, M. M. Finiteness of the number of lacunae in the spectrum of a multidimensional polyharmonic operator with periodic potential. (Russian) **(82f:35142)**

(Tijica, Šerban) See Nicolescu, Miron, **(82f:01185)**

Wachnicka, Krystyna On the Green function for a certain three-harmonic problem. **(82e:35034)**

Weber, Albin Über das wesentliche Spektrum des gestörten polyharmonischen Operators. II. **(82d:35075)**

Biography:
Nicolescu, Miron See Nicolescu, Miron, **(82f:01185)**

31B35 Connections with differential equations

Watson, N. A. The asymptotic behaviour of temperatures and subtemperatures. **82f:31004**

secondary classifications:

Diaz, R. A Runge theorem for solutions of the heat equation. **(82a:35050)**

Goman, O. (with Popov, V. V.) A new method of using the relationship between p -harmonic and analytic functions for a solution to the problems of potential theory. (Russian. English summary) **(82e:31009)**

Martynenko, M. D. (with Šipka, I. G.) Analytic extension of metaharmonic potentials. (Russian. English summary) **(82d:31010)**

Pierre, Michel Représentant précis d'un potentiel parabolique. **(82e:31014)**

Popov, V. V. See Goman, O., **(82e:31009)**

Šipka, I. G. See Martynenko, M. D., **(82d:31010)**

31B99 None of the above, but in this section

Černjavskii, A. G. Quasianalytic analogues of some properties of harmonic functions. (Russian. Armenian summary) **82j:31008**

Williams, Stephen A. Analyticity of the boundary for Lipschitz domains without the Pompeiu property. **82j:31009**

31Cxx Other generalizations

31C05 Harmonic, subharmonic, superharmonic functions

Ikegami, Tetsuo On a generalization of Luke's theorem. **82m:31012**

Itô, Masayuki (with Suzuki, Noriaki) Completely superharmonic measures for the infinitesimal generator A of a diffusion semigroup and positive eigenelements of A . **82c:31009**

Lyons, T. J. Finely holomorphic functions. **82d:31011a**

A theorem in fine potential theory and applications to finely holomorphic functions. **82d:31011b**

de la Pradelle, Arnaud Deux remarques sur la représentation intégrale des fonctions excessives ou surharmoniques. **82a:31009**

Suzuki, Noriaki See Itô, Masayuki, **82c:31009**

secondary classifications:

Besjes, J. G. Separately real analytic functions and linear partial differential operators with real analytic coefficients. **(82m:35037)**

Cranston, Michael (with Orey, Steven; Rösler, Uwe) Exterior Dirichlet problems and the asymptotic behavior of diffusions. **(82e:60123)**

Kuz'menko, Ju. T. Positive solutions of elliptic equations in bounded domains. (Russian) **(82g:35033)**

Orey, Steven See Cranston, Michael; et al., **(82e:60123)**

Rösler, Uwe See Cranston, Michael; et al., **(82e:60123)**

Stoica, Lucretiu On a result of T. Watanabe on excessive functions. **(82c:60136)**

31C10 Pluriharmonic and plurisubharmonic functions [See also 32F05.]

Cherfaoui, Najib Rayon de bornologie des fonctions plurisousharmoniques sur les espaces de Banach. (English summary) **82a:31008**

secondary classifications:

de Bartolomeis, Paolo (with Tomassini, Giuseppe) Traces of pluriharmonic functions. **(82b:32023)**

Bedford, Eric ($\partial\bar{\partial}$), and the real parts of CR functions. **(82a:32024)**

Debiard, Amédée (with Gaveau, Bernard) Méthodes de contrôle optimal en analyse complexe. IV. Applications aux algèbres de fonctions analytiques. **(82b:32024)**

El Mir, Hassine Fonctions plurisousharmoniques et ensembles polaires. **(82d:32010)**

Gaveau, Bernard (with Malliavin, Paul) Courbure des surfaces de niveau des fonctions holomorphes bornées dans la boule. (English summary) [Curvature of level surfaces of bounded holomorphic functions in the ball] **(82m:32005)**

See also Debiard, Amédée, **(82b:32024)**

Malliavin, Paul See Gaveau, Bernard, **(82m:32005)**

Mitchell, Josephine Lipschitz spaces of holomorphic and pluriharmonic functions on bounded symmetric domains in \mathbb{C}^N ($N > 1$). **(82e:32061)**

Sadullaev, A. The operator $(dd^c U)^n$ and inner functions in \mathbb{C}^n . (Russian) **(82b:32028)**

Tomassini, Giuseppe See de Bartolomeis, Paolo, **(82b:32023)**

31C12 Potential theory on Riemannian manifolds [See also 53C20; for Hodge theory, see 58A14.]

Chung, Lung Ock (with Sario, Leo; Wang, Cecilia) Harmonic L^p functions on the Poincaré N -ball. **82k:31010**

Lumer, Günter Equations de diffusion sur des réseaux infinis. **82a:31010**

Espaces ramifiés, et diffusions sur les réseaux topologiques. (English summary) **82a:31011**

Sario, Leo See Chung, Lung Ock; et al., **82k:31010**

Wang, Cecilia See Chung, Lung Ock; et al., **82k:31010**

Yamasaki, Maretsugu Quasiharmonic classification of infinite networks. **82g:31010**

secondary classifications:

Eells, James (with Lemaire, L.) Deformations of metrics and associated harmonic maps. **(82a:58023)**

Fuglede, Bent Harmonic morphisms between Riemannian manifolds. **(82b:58034)**

Jost, Jürgen ★Eindeutigkeit harmonischer Abbildungen. (German) [Uniqueness of harmonic mappings] **(82a:58036)**

Univalence of harmonic mappings between surfaces. **(82b:58013)**

Ein Existenzbeweis für harmonische Abbildungen, die ein Dirichletproblem lösen, mittels der Methode des Wärmeflusses. (English summary) **(82f:58036)**

Lemaire, L. See Eells, James, **(82a:58023)**

Minahin, V. V. The Liouville theorem and the Harnack inequality for the Beltrami equation on an arbitrary manifold. (Russian) **(82b:53056)**

31C15 Potentials and capacities

Cegrell, Urban On product capacities with application to complex analysis. **82h:31010**

Forst, Gunnar Noyaux potentiels sur \mathbb{R}_+ . **82b:31014**

Meyer, Burnett Inequalities for the generalized transfinite diameter. **82g:31011**

Sivakesan, P. On two capacities in a harmonic space. **82a:31012**

Watanabe, Hisako The balayage onto closed sets with respect to continuous function-kernels. **82k:31011**

secondary classifications:

Carmona, René Infinite-dimensional Newtonian potentials. **(82f:60175)**

Cegrell, Urban Capacities and extremal plurisubharmonic functions on subsets of \mathbb{C}^n . **(82e:32029)**

Dellacherie, Claude Mesurabilité des débuts et théorème de section: le lot à la portée de toutes les bourses. **(82j:60057)**

Gardner, Clifford S. (with Radin, Charles) The infinite-volume ground state of the Lennard-Jones potential. **(82b:82062)**

Hogh, Hans-Jürgen (with Wildenhain, Günther) Eine Bemerkung zum Balayage-Prinzip für Riesz-Kerne. **(82d:31006)**

Mattila, Pertti Integral geometric properties of capacities. **(82b:31008)**

Maz'ja, V. G. An imbedding theorem and multipliers in pairs of S. L. Sobolev spaces. (Russian) **(82j:46044)**

Mizuta, Yoshihiro On the behavior at infinity of Green potentials in a half space. **(82b:31011)**

Radin, Charles See Gardner, Clifford S., **(82b:82062)**

Wildenhain, Günther See Hogh, Hans-Jürgen, **(82d:31006)**

31C20 Discrete potential theory and numerical methods

Yamasaki, Maretsugu Biharmonic Green function of an infinite network. **82f:31005**

secondary classifications:

Neuberger, John W. Finite-dimensional potential theory applied to numerical analysis of linear systems. **(82j:65080)**

31C25 Dirichlet spaces

Bertin, E. M. J. Un produit d'espaces de Dirichlet. **82e:31013**

Bosgiraud, Jacques Problème de type mixte sur la frontière de Martin. **82h:31015**

Feyel, Denis Sur le gradient mutuel des potentiels. **82b:31016**

Lassoued, L. Espaces de Dirichlet et axiomatique de Brelot. **82d:31012**

Le Jan, Yves Problèmes frontiers en théorie du potentiel. **82a:31013**

Pierre, Michel Représentant précis d'un potentiel parabolique. **82e:31014**

secondary classifications:

Boboc, Nicu (with Bucur, Gheorghe; Cornea, Aurel) Autodual H -cones. **(82e:31017)**

Bucur, Gheorghe See Boboc, Nicu; et al., **(82e:31017)**

Cornea, Aurel See Boboc, Nicu; et al., **(82e:31017)**

Eells, James (with Lemaire, L.) A report on harmonic maps. **(82b:58033)**

Lemaire, L. See Eells, James, **(82b:58033)**

Maeda, Fumi-yuki ★Dirichlet integrals on harmonic spaces. **(82a:31019)**

- Okada, Masumi Potentiels kähleriens et espaces de Dirichlet. (English summary) (82b:32027)
 Paclot, Philippe Espaces de Dirichlet et capacités fonctionnelles sur des triplets de Hilbert Schmidt. (82a:46073)
 Tomisaki, Matsuyo Dirichlet forms and diffusion processes associated with product measures. (82b:60147)

31C35 Martin boundary theory [See also 60J50.]

31C99 None of the above, but in this section

- Ancona, Alano Principe de Harnack à la frontière et problèmes de frontière de Martin. (82a:31014)
 Berg, Christian Quelques remarques sur le cône de Stieltjes. (82b:31017)
 Forst, Gunnar Sur le théorème de Hunt-Lion-Hirsch. (English summary) (82a:31015)
 Hirsch, Francis Principe complet du maximum et principe complet du maximum relatif. (82a:31016)
 Laub, Jesper On unicity of the Riesz decomposition of an excessive measure. (82b:31018)
 Convolution kernels satisfying the domination principle. (82a:31015)
 Wu, Jang Mei G. On parabolic measures and subparabolic functions. (82b:31019a)
 Erratum to: "On parabolic measures and subparabolic functions". (82b:31019b)

secondary classifications:

- Černý, A. P. Discovery of solutions of source-sink type for the potential of generalized Cauchy-Riemann systems of a certain type. (Russian) (82m:35014)
 Dragmire, O. P. The inequalities of M. Riesz, A. Kolmogorov and A. Zygmund for functions of the Fedorov-Smirnov class. (Russian) (82f:30054)
 Hirsch, Francis Quotients de fonctions définies-négatives et synthèse spectrale. (82f:43005)
 Pierre, Michel Evolution equations with irregular obstacles. (82j:35080)

31D05 Axiomatic potential theory

- Anandam, Victor Admissible superharmonic functions. (82a:31016)
 Ancona, Alano Erratum: "Principe de Harnack à la frontière et théorème de Fatou pour un opérateur elliptique dans un domaine lipschitzien" [Ann. Inst. Fourier (Grenoble) 28 (1978), no. 4, 169–213; MR 80d:31006]. (82a:31017)
 Arsove, Maynard (with Leutwiler, Heinz) Quasi-units in mixed lattice structures. (82a:31018)
 Bliehdner, J. (with Hansen, Wolfhard) Bases in standard balayage spaces. (82b:31020)
 Boboc, Nicu On the extension of harmonic mappings. (Romanian) (82b:31021)
 (with Bucur, Gheorghe; Cornea, Aurel) Autodual H -cones. (82a:31017)
 (with Bucur, Gheorghe; Cornea, Aurel) Order and convexity in potential theory: H -cones. (82i:31011)
 Boukricha, A. (with Hansen, Wolfhard) Characterization of perturbations of harmonic spaces. (82b:31022)
 Bucur, Gheorghe See Boboc, Nicu; et al., 82a:31017 and 82i:31011
 Cornea, Aurel See Boboc, Nicu; et al., 82a:31017 and 82i:31011
 Feyel, Denis Représentation des fonctionnelles surmedianes. [Representation of supermedian functionals] (82m:31013)
 Hansen, Wolfhard See Bliehdner, J., 82b:31020 and Boukricha, A., 82b:31022
 (Höllein, Herbert) See Boboc, Nicu; et al., 82i:31011
 Leutwiler, Heinz See Arsove, Maynard, 82a:31018
 Maeda, Fumi-yuki Star-Dirichlet integrals on harmonic spaces. (82a:31019)
 Meier, Wolfgang Charakterisierung von Produkten harmonischer Räume. [Characterization of products of harmonic spaces] (82i:31010)
 Netuka, Ivan The classical Dirichlet problem and its generalizations. (82e:31018)
 Popa, Eugen Standard spaces of balayage-standard H -cones. (82i:31012)
 Premalatha On a superharmonic extension. (82i:31013)
 Stoica, Lucretiu Local operators and Markov processes. (82a:31020)

secondary classifications:

- Hess, H.-U. Infinite-dimensional convex sets with a property common to finite-dimensional convex sets. (82c:46012)
 Lakshmanan, Vimala Integral representation of superharmonic functions of finite order in \mathbb{R}^n . (82a:31005)
 Le Jan, Yves Problèmes frontières en théorie du potentiel. (82a:31013)
 Watanabe, Hisako The Choquet boundary and the integral representation. (82f:46013)
 Wu, Jang Mei G. On parabolic measures and subparabolic functions. (82b:31019a)
 Erratum to: "On parabolic measures and subparabolic functions". (82b:31019b)

32-XX SEVERAL COMPLEX VARIABLES AND ANALYTIC SPACES (For infinite-dimensional holomorphy, see also 46G20, 58B12.)

32-01 Elementary exposition, textbooks

- Eisenreich, Günther Vorlesung über Funktionentheorie mehrerer Variabler. (German) [Lecture on the theory of functions of several variables] (82i:32001)
 Grauert, Hans (with Remmert, Reinhold) Theory of Stein spaces. (82d:32001)
 (Huckleberry, Alan) See Grauert, Hans; et al., 82d:32001
 Remmert, Reinhold See Grauert, Hans, 82d:32001
 Rudin, Walter Function theory in the unit ball of \mathbb{C}^n . (82i:32002)

secondary classifications:

- Nachbin, Leopoldo Why holomorphy in infinite dimensions? (82i:46066)
 Rudin, Walter The finiteness of compact varieties in \mathbb{C}^n . (82c:32014)

32-02 Advanced exposition (research surveys, monographs, etc.)

- Laurent'ev, M. M. Some problems of analytic continuation. (Russian) (82f:32001)
 Nishino, Toshio Value distribution of analytic functions of two variables. (Japanese) (82j:32001)
 Satake, Ichirō Algebraic structures of symmetric domains. (82i:32003)
 Sundararaman, D. Moduli, deformations and classifications of compact complex manifolds. (82c:32001)

secondary classifications:

- Björk, J.-E. Rings of differential operators. (82g:32013)
 Nagel, Alexander (with Stein, Elias M.) Lectures on pseudodifferential operators: regularity theorems and applications to nonelliptic problems. (82f:47059)
 Stein, Elias M. See Nagel, Alexander, (82f:47059)

32-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Gray, John W. Fragments of the history of sheaf theory. (82j:01060)
 Bibliography:
 Sheaf theory See Gray, John W., (82j:01060)

32-04 Explicit machine computation and programs (not the theory of computation or programming)

32-06 Proceedings, conferences, etc.

- (Bavrin, I. I.) See Mathematical analysis and the theory of functions, 82g:32001
 (Formess, John Erik) See Recent developments in several complex variables, 82g:32002
 (Kra, Irwin) See Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference, 82f:32002
 (Kytmanov, A. M.) See Some problems of multidimensional complex analysis, 82f:32003
 (Maskit, Bernard) See Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference, 82f:32002
 Analytic varieties Various problems on analytic varieties. (Japanese) (82b:32001)
 Asterisque Representation theorems for Hardy spaces. (82a:32001)
 Conference:
 Complex Analysis Journées Complexes, Nancy 80. (French) [Conference on Complex Analysis, Nancy 80] (82i:32004)
 Recent Developments in Several Complex Variables Recent developments in several complex variables. (82g:32002)
 Riemann Surfaces and Related Topics Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. (82f:32002)
 Mathematical analysis and the theory of functions Математический анализ и теория функций. (Russian) [Mathematical analysis and the theory of functions] (82g:32001)
 Multidimensional complex analysis Некоторые вопросы многомерного комплексного анализа. (Russian) [Some problems of multidimensional complex analysis] (82f:32003)
 Nancy Journées Complexes, Nancy 80. (French) [Conference on Complex Analysis, Nancy 80] (82i:32004)
 Princeton, N.J. Recent developments in several complex variables. (82g:32002)
 Recent developments in several complex variables Recent developments in several complex variables. (82g:32002)
 Representation theorems for Hardy spaces Representation theorems for Hardy spaces. (82a:32001)
 Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. (82f:32002)
 Some problems of multidimensional complex analysis Некоторые вопросы многомерного комплексного анализа. (Russian) [Some problems of multidimensional complex analysis] (82f:32003)
 Stony Brook, N.Y. Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. (82f:32002)
 Symposium:
 Topics Related with Prehomogeneous Vector Spaces Topics related with prehomogeneous vector spaces. (Japanese) (82g:32003)
 Various Problems on Analytic Varieties Various problems on analytic varieties. (Japanese) (82b:32001)
 Theory of functions Математический анализ и теория функций. (Russian) [Mathematical analysis and the theory of functions] (82g:32001)
 Topics related with prehomogeneous vector spaces Topics related with prehomogeneous vector spaces. (Japanese) (82g:32003)
 Various problems on analytic varieties Various problems on analytic varieties. (Japanese) (82b:32001)
 secondary classifications:
 (Machado, Silvio) See Functional analysis, holomorphy, and approximation theory, (82c:46003)
 Algebraic varieties Classification of algebraic varieties (toward the 1980s). (Japanese) (82a:14002)
 Approximation theory Functional analysis, holomorphy and approximation theory. (82c:46003)
 Classification of algebraic varieties (toward the 1980s) Classification of algebraic varieties (toward the 1980s). (Japanese) (82a:14002)
 Complex analysis of singularities Complex analysis of singularities. (82g:14002)
 Functional analysis, holomorphy, and approximation theory Functional analysis, holomorphy and approximation theory. (82c:46003)

Holomorphy ★Functional analysis, holomorphy and approximation theory. (82c:46003)
Hyperfunctions and linear differential equations ★Hyperfunctions and linear differential equations. VI. (Japanese) (82d:35009)

Linear differential equations ★Hyperfunctions and linear differential equations. VI. (Japanese) (82d:35009)

Rio de Janeiro ★Functional analysis, holomorphy and approximation theory. (82c:46003)

Seminar:

Functional Analysis, Holomorphy, and Approximation Theory ★Functional analysis, holomorphy and approximation theory. (82c:46003)

Symposium:

Classification of Algebraic Varieties (Toward the 1980s) ★Classification of algebraic varieties (toward the 1980s). (Japanese) (82a:14002)

Complex Analysis of Singularities ★Complex analysis of singularities. (82g:14002)

Hyperfunctions and Linear Differential Equations ★Hyperfunctions and linear differential equations. VI. (Japanese) (82d:35009)

32Axx Holomorphic functions of several complex variables

32A05 Power series, series of functions

Balazova, O. Ju. Expansion of functions that are holomorphic in a polyhedron into a Dirichlet series, and the dual Lagrange interpolation series. (Russian) 82j:32002

Čulik, I. I. See Kardaš, A. I.; et al. 82c:32002

Dautov, S. A. Sufficient conditions for absolute convergence of a series from its Taylor coefficients (conditions for stability of multidimensional digital filters). (Russian) 82k:32001

Južakov, A. P. An estimate of the domain of convergence and the residue of a multiple Lagrange series for systems of implicit functions. (Russian) 82f:32004

Kardaš, A. I. (with Kuzik, A. M.; Čulik, I. I.) Some asymptotic properties of Newton diagrams of a function of two complex variables and differential properties of a curve of adjoining radii of convergence. (Ukrainian. Russian summary) 82c:32002

Kuzik, A. M. See Kardaš, A. I.; et al. 82c:32002

Lopusušanskii, O. V. The holomorphy of functions in a given domain. (Russian) 82k:32002

secondary classifications:

Bhola, D. K. See Gupta, J. S., (82k:32010)

Gupta, J. S. (with Bhola, D. K.) Quadratic mean of entire functions of several complex variables. (82k:32010)

Janusšauskas, A. I. ★Двойные ряды. (Russian) [Double series] (82f:40006)

Leinartas, E. K. Analytic continuation of the generalized Hadamard product. (Russian) (82i:32039)

Salimov, F. G. Geometric mean values of entire functions represented by multiple Dirichlet series. (Russian) (82k:32012)

32A07 Special domains (Reinhardt, Hartogs, tube domains, etc.)

Bedford, Eric Holomorphic mapping of products of annuli in \mathbb{C}^n . 82c:32001

Carmichael, Richard D. (with Hayashi, Elmer K.) A pointwise growth estimate for analytic functions in tubes. 82a:32002

Dziubiński, Izidor (with Sitarski, Ryszard) On classes of holomorphic functions of many variables starlike and convex on some hypersurfaces. 82a:32003

Hayashi, Elmer K. See Carmichael, Richard D., 82a:32002

Kodama, Akio On generalized Siegel domains with exponent (c_1, c_2, \dots, c_n) . 82d:32002

Kopaev, A. V. A criterion for biholomorphic mappings of bicircular regions to be star-shaped. (Russian. Georgian and English summaries) 82a:32004

Lieutenant, J.-L. Decomposition of analytic functions on \mathbb{R}^n in sum of holomorphic functions in conic tubes. 82i:32005

Decomposition of functions holomorphic in tuboids. 82k:32003

Sitarski, Ryszard See Dziubiński, Izidor, 82a:32003

Wang, De Lin (with Xu, Yi Chao) On the classification of bounded semicircular domains in \mathbb{C}^2 . (Chinese) 82a:32005

Xu, Yi Chao See Wang, De Lin, 82a:32005

secondary classifications:

Boland, Philip J. (with Dineen, Seán) Holomorphy on spaces of distribution. (82i:46065)

Carmichael, Richard D. (with Hayashi, Elmer K.) Analytic functions in tubes which are representable by Fourier-Laplace integrals. (82f:32006)

(with Richters, Stephen P.) Growth of H^p functions in tubes. (82h:32008)

Dineen, Seán See Boland, Philip J., (82i:46065)

Druzkowski, Ludwik M. A theorem on convex tube domains in infinite-dimensional topological vector spaces. (Russian summary) (82f:32028)

Hayashi, Elmer K. See Carmichael, Richard D., (82f:32006)

Kaiser, Gerald Holomorphic gauge theory. (82c:81109)

Petrosjan, A. I. Uniform approximation by polynomials on special Weil polyhedra with real nondegenerate skeleton in the space \mathbb{C}^2 . (Russian. Armenian summary) (82c:32018)

Richters, Stephen P. See Carmichael, Richard D., (82h:32008)

Rudin, Walter ★Function theory in the unit ball of \mathbb{C}^n . (82i:32002)

Širinbekov, M. Hartogs compacta of holomorphy. (Russian) (82j:32028)

Vladimirov, V. S. (with Zavjalov, B. I.) Tauberian theorems in quantum field theory. (Russian) (82c:81072)

Zavjalov, B. I. See Vladimirov, V. S., (82c:81072)

Zhang, Jin Hao Coefficient problems of holomorphic mappings on Reinhardt domains. (82b:32042)

32A10 Holomorphic functions

Ålander, H. On a minimum principle in several complex variables. 82g:32004

de Bartolomeis, Paolo (with Tomassini, Giuseppe) Idéaux de type fini dans $A^n(D)$. (English summary) [Ideals of finite type in $A^n(D)$] 82k:32004

Bavrin, I. I. Sharpness of estimates for Bieberbach-Eilenberg functions and for functions of class $\tilde{C}_p(1)$ in the hypersphere case. (Russian. Georgian and English summaries) 82k:32005

Bavrina, K. P. Sharp estimates in the class $Y_p(\frac{1}{2})$. (Russian) 82j:32003

Bondar, A. V. A holomorphy criterion for continuous mappings. (Russian) 82g:32005

Delsarte, Philippe (with Genin, Yves V.; Kamp, Yves G.) A simple proof of Rudin's multivariable stability theorem. 82i:32006

Genin, Yves V. See Delsarte, Philippe; et al., 82i:32006

Gregor, Jifi Integral representation of n -variable positive real functions. 82i:32007

Heath, L. F. (with Suffridge, T. J.) Holomorphic retracts in complex n -space. 82c:32003

Hohlov, Ju. E. The Loewner-Kufarev equation and the Bazilevič mapping in \mathbb{C}^n . (Russian) 82i:32008

Ionin, I. D. Circular and multiply-circular convex complete bounded domains in \mathbb{C}^n , $n \geq 2$, and norms that correspond to them. (Russian) 82h:32001

Criteria for starlikeness of biholomorphic mappings in domains of class (T) and type (B) in \mathbb{C}^n , $n \geq 2$. (Russian) 82i:32009

Kamp, Yves G. See Delsarte, Philippe; et al., 82i:32006

Kolaski, Clinton J. A new look at a theorem of Forelli and Rudin. 82b:32002

Kopaev, A. V. On the expansion of holomorphic functions of two complex variables in quasipower bases. (Russian) 82j:32004

Krantz, Steven G. Holomorphic functions of bounded mean oscillation and mapping properties of the Szegő projection. 82i:32010

Lacabizbe, T. I. A class of holomorphic functions of several complex variables. (Russian. Georgian and English summaries) 82i:32005

The class $R_p(\alpha)$ of holomorphic functions and extremal problems for this class of functions. (Russian) 82j:32005

Mkrtejan, E. S. Reconstruction of holomorphic functions from their values on certain sets of uniqueness. (Russian) 82k:32006

Šolhet, D. M. Some estimates of the domain of existence of p -valent inversions of holomorphic mappings in \mathbb{C}^n . (Russian) 82k:32007

Stolarsky, Kenneth B. Zero-free regions of exponential sums. 82k:32008

Suffridge, T. J. See Heath, L. F., 82c:32003

Tomassini, Giuseppe See de Bartolomeis, Paolo, 82k:32004

Tung, Chia Chi Minimal equations, global reducibility of holomorphic functions, and relative rationality of analytic sets. 82c:32004

secondary classifications:

Ansemil, J. M. (with Ponte, S.) An example of a quasinnormable Fréchet function space which is not a Schwartz space. (82i:46004)

Beştes, J. G. Separately real analytic functions and linear partial differential operators with real analytic coefficients. (82m:35037)

Bianchini, Mauro $\mathcal{H}(E)$ -bounded subsets of a locally convex space. (82b:46055)

Colombeau, Jean-François (with Mujica, Jorge) Existence of holomorphic mappings with prescribed asymptotic expansions at a given set of points in infinite dimensions. (82m:46049)

Dziubiński, Izidor (with Sitarski, Ryszard) On classes of holomorphic functions of many variables starlike and convex on some hypersurfaces. (82a:32003)

Hackevič, V. A. (with Šolhet, D. M.) On a generalization of Montel's theorem for the case of analytic mappings in Banach spaces. (Russian) (82k:46069)

Isidro, J. M. On the distinguished character of the function spaces of holomorphic mappings of bounded type. (82c:46056)

Janušauskas, A. I. Some classes of mappings associated with the Laplace equation. (Russian. Lithuanian and English summaries) (82a:35033)

Li, Ta Chung Some interpolation properties. (82a:32010)

Lieutenant, J.-L. Decomposition of analytic functions on \mathbb{R}^n in sum of holomorphic functions in conic tubes. (82i:32005)

Mujica, Jorge See Colombeau, Jean-François, (82m:46049)

Nachbin, Leopoldo Analogies entre l'holomorphie et la linéarité. (82c:46064)

Ponte, S. See Ansemil, J. M., (82i:46004)

Reich, Ludwig (with Schwaiger, Jens) Linearisierung formal-biholomorpher Abbildungen und Iterationsprobleme. (82g:39008)

Rudin, Walter ★Function theory in the unit ball of \mathbb{C}^n . (82i:32002)

Schwaiger, Jens See Reich, Ludwig, (82g:39008)

Sitarski, Ryszard See Dziubiński, Izidor, (82a:32003)

Šolhet, D. M. See Hackevič, V. A., (82k:46069)

32A15 Entire functions

Agranovič, P. Z. (with Ronkin, L. I.) Functions of completely regular growth of several variables. (Russian) 82k:32009

Berstein, Carlos Alberto (with Taylor, B. A.) Interpolation problems in \mathbb{C}^n with applications to harmonic analysis. 82h:32002

Bhola, D. K. See Gupta, J. S., 82k:32010

Carmichael, Richard D. (with Hayashi, Elmer K.) Analytic functions in tubes which are representable by Fourier-Laplace integrals. 82f:32006

Demilly, Jean-Pierre Construction d'hypersurfaces irréductibles avec lieu singulier donné dans \mathbb{C}^n . 82f:32007

Dzafrov, P. B. (with Mitjagin, B. S.) The structure of polynomial ideals in the algebra of entire functions. 82a:32006

Gadziev, A. D. Estimation of differential polynomials in a class of entire functions of several variables. (Russian. Azerbaijani and English summaries) 82i:32011

Gay, Roger Division des fonctionnelles analytiques. Applications aux fonctions entières de type exponentiel moyennes-périodiques. 82f:32008

Gupta, J. S. (with Bhola, D. K.) Quadratic mean of entire functions of several complex variables. 82k:32010

Hayashi, Elmer K. See Carmichael, Richard D., 82f:32006

Maergoiz, L. S. Regularized types of convex and entire functions of several variables. (Russian) 82h:32003

Regularization of types of convex and entire functions with strictly convex order-hypersurface. (Russian) **82c:32005**

Mitjagin, B. S. See **Djakov, P. B.**, **82a:32006**

Ronkin, A. L. Distribution of zeros of quasipolynomials of several variables. (Russian) **82b:32003**

Quasipolynomial zero sets. (Russian) **82b:32011**

Ronkin, L. I. Continuity of the indicator of an entire function with "plane zeros". (Russian) **82c:32002**

See also **Agranovič, P. Z.**, **82b:32009**

Rudin, Walter. Totally real Klein bottles in \mathbb{C}^2 . **82c:32012**

Salimov, F. G. Geometric mean values of entire functions represented by multiple Dirichlet series. (Russian) **82b:32012**

Sarkisjan, S. C. Some analogues of Wiman-Valiron theorems. (Russian) **82d:32003**

Schöpf, G. Construction of an entire function of several variables with a given asymptotic distribution of its zero points. (Russian) **82j:32006**

Taylor, B. A. See **Berenstein, Carlos Alberto**, **82b:32002**

Trutnev, V. M. Convolution equations in convex domains of cone type in \mathbb{C}^n . (Russian) **82b:32004**

Tung, S. H. Extension of Bernstein's theorem. **82b:32013**

Watanabe, Chikara. A note on an algebraic divisor in \mathbb{C}^n . **82i:32013**

secondary classifications:

Bruma, Joaquim. Analytic Denjoy-Carleman algebras. (Spanish. English summary) **(82a:30023)**

Carmichael, Richard D. (with Hayashi, Elmer K.) A pointwise growth estimate for analytic functions in tubes. **(82a:32002)**

Colombeau, Jean-François (with Matos, Mário C.) Convolution equations in spaces of infinite-dimensional entire functions. **(82b:46058)**

(with Matos, Mário C.) On some spaces of entire functions defined on

infinite-dimensional spaces. **(82b:46060)**

(with Gay, Roger; Perrot, B.) Division by holomorphic functions and convolution

equations in infinite dimension. **(82c:46060)**

Gay, Roger. See **Colombeau, Jean-François**; et al., **(82c:46060)**

Hayashi, Elmer K. See **Carmichael, Richard D.**, **(82a:32002)**

Ishimura, Ryuichi. Théorèmes d'existence et d'approximation pour les équations aux dérivées partielles linéaires d'ordre infini. **(82f:35048)**

Jamulskas, A. I. Composition of singularities of functions of two complex variables. (Russian) **(82a:32008)**

Lesmes, Jaime. Uniqueness classes of the Cauchy problem for convolution operators. (Spanish) **(82g:46079)**

Matos, Mário C. See **Colombeau, Jean-François**, **(82b:46058)** and **(82b:46060)**

Perrot, B. See **Colombeau, Jean-François**; et al., **(82c:46060)**

Petrenko, V. P. Regularity of growth of algebroid solutions of algebraic differential equations. (Russian) **(82c:34008)**

Robaschik, D. (with Tröger, G.; Wieczorek, E.) Light-cone expansion of matrix elements of current commutators. **(82c:81064)**

Schempp, Walter. On Schwartz kernels relative to the function space $\mathcal{H}_\infty(E)$. **(82c:46041)**

Sebbar, A. Prolongement des solutions holomorphes de certains opérateurs différentiels d'ordre infini à coefficients constants. **(82f:35049)**

Sibony, Nessim (with Wong, Pit Mann) Some results on global analytic sets. **(82b:32017)**

Tröger, G. See **Robaschik, D.**; et al., **(82c:81064)**

Wieczorek, E. See **Robaschik, D.**; et al., **(82c:81064)**

Wong, Pit Mann. See **Sibony, Nessim**, **(82b:32017)**

Yoshioka, Tsuneo. Cohomologie à estimation L^2 et extension des fonctions holomorphes avec contrôle de la croissance. **(82f:32029)**

32A17 Normal families

secondary classifications:

Primicerio, Angela Selvaggi (with Taiani, Geraldine) Families of analytic discs with boundary on a nongeneric CR submanifold. (Italian. English summary) **(82j:32047)**

Taiani, Geraldine. See **Primicerio, Angela Selvaggi**, **(82j:32047)**

32A20 Meromorphic functions

Bandman, T. M. Surjective holomorphic mappings of projective manifolds. (Russian) **82j:32007**

Heins, Maurice. Analytic entities having associated maps with dense images. **82b:32004**
A realization problem in the theory of analytic curves. **82m:32001**

secondary classifications:

Coleff, N. (with Herrera, M.; Lieberman, D.) Algebraic cycles as residues of meromorphic forms. **(82i:32031)**

Herrera, M. See **Coleff, N.**; et al., **(82i:32031)**

Kimura, Toshihisa (with Matuda, Tizuko) On systems of differential equations of order two with fixed branch points. **(82c:34010)**

Lieberman, D. See **Coleff, N.**; et al., **(82i:32031)**

Matuda, Tizuko. See **Kimura, Toshihisa**, **(82c:34010)**

32A22 Nevanlinna theory: growth estimates {For geometric theory, see 32H25, 32H30.}

Alexander, H. Projective capacity. **82b:32014**

Gruman, Lawrence. La géométrie globale des ensembles analytiques dans \mathbb{C}^n . **82f:32009**

Kazarnovskii, B. Ja. On zeros of exponential sums. (Russian) **82i:32014**

Petrenko, V. P. (with Šimša, Ja.) A class of entire curves. (Russian. Armenian summary) **82c:32003**

Sibony, Nessim (with Wong, Pit Mann) Some remarks on the Caorati-Weierstrass theorem. **82b:32015**

Šimša, Ja. See **Petrenko, V. P.**, **82c:32003**

Wong, Pit Mann. See **Sibony, Nessim**, **82b:32015**

secondary classifications:

Bandman, T. M. Holomorphic functions omitting two values on an affine surface. (Russian. English summary) **(82g:32032)**

Marčenko, I. I. Growth and value distributions of some classes of plurisubharmonic functions. (Russian. English summary) **(82b:32026)**

Okada, Masami. Une estimation modifiée du type de Bezout pour les applications holomorphes équidimensionnelles entières de \mathbb{C}^n . (English summary) **(82c:32025)**

Sung, Chen Han. On the deficiencies of holomorphic curves in complex projective space. **(82c:30032)**

Watanabe, Chikara. A note on an algebraic divisor in \mathbb{C}^n . **(82i:32013)**

32A25 Integral representation

Bogdanov, V. I. Integral representations for functions of two complex variables in

generalized bicircular domains. (Russian) **82j:32008**

Charpentier, Philippe. Formules explicites pour les solutions minimales de l'équation $\bar{\partial}u=f$ dans la boule et dans le polydisque de \mathbb{C}^n . **82j:32009**

Gal'mudimov, R. Z. Some classes of quasianalytic functions in \mathbb{C}^n ($n \geq 1$). (Russian) **82i:32015**

On a method of extending integral representations. (Russian) **82m:32002**

Hatrup, Dieter. ★ Der $\bar{\partial}$ -Operator auf Produkten streng pseudokonvexer Gebiete.

(German) [The $\bar{\partial}$ -operator on products of strictly pseudoconvex domains] **82b:32005**

Henkin, G. M. (with Leiterer, Jürgen) Global integral formulas for solving the $\bar{\partial}$ -equation on Stein manifolds. **82b:32016**

Kartašev, L. M. Hadamard convolutions in a polydisc. (Russian) **82c:32006**

Kopaev, A. V. On a generalization of the Martinelli-Bochner integral formula. (Russian) **82b:32005**

Krasnoščekov, A. L. Operator connection between functions of certain classes and integrals of Temljakov type of the first kind. (Russian) **82b:32017**

Kytmanov, A. M. Exact calculation of an integral of Martinelli-Bochner type in a ball in \mathbb{C}^n . (Russian) **82i:32016**

Latyšev, A. V. Integral representations for a class of bicircular domains. (Russian) **82b:32018**

Leiterer, Jürgen. See **Henkin, G. M.**, **82b:32016**

Litvinjuk, V. A. On integral representations. (Russian) **82b:32006**

Milovanov, V. F. Operator connection of integrals of Temljakov-Bavrin type of the first kind and first order in the case of a bicylinder. (Russian) **82b:32007**

Oniani, G. A. Integral representations of analytic and n -harmonic functions in the unit polydisc. (Russian. Georgian and English summaries) **82b:32006**

Salvi, Rodolfo. On a functional calculus in a commutative algebra. (Italian) **82m:32003**

Shih, Mou Hsiang. Rouché's and related theorems for analytic functions of several complex variables. **82b:32019**

Zappa, Paolo. Remarks on the Bochner-Martinelli kernels. (Italian. English summary) **82g:32006**

Zhong, Tong De. Transformation formulae of the multiple singular integrals with

Bochner-Martinelli kernel. (Chinese) **82a:32007**

Zinov'ev, B. S. An algebraic method of convolution of series of several complex variables and some integral formulas. (Russian) **82c:32004**

secondary classifications:

Airapetjan, R. A. (with Henkin, G. M.) Analytic continuation of CR-functions across the "edge of the wedge". (Russian) **(82b:32039)**

Aizenberg, L. A. (with Bolotov, V. A.; Cih, A. K.) On the solution of systems of nonlinear algebraic equations using the multidimensional logarithmic residue.

Solvability in radicals. (Russian) **(82d:12013)**

Bolotov, V. A. See **Aizenberg, L. A.**; et al., **(82d:12013)**

Carmichael, Richard D. (with Hayashi, Elmer K.) Analytic functions in tubes which are representable by Fourier-Laplace integrals. **(82f:32006)**

Distributional boundary values in \mathcal{O}_{L^p} . IV. **(82g:32011)**

Cih, A. K. See **Aizenberg, L. A.**; et al., **(82d:12013)**

Hayashi, Elmer K. See **Carmichael, Richard D.**, **(82f:32006)**

Henkin, G. M. See **Airapetjan, R. A.**, **(82b:32039)**

Kopaev, A. V. On the expansion of holomorphic functions of two complex variables in quasipower bases. (Russian) **(82j:32004)**

Landucci, Mario. Solutions with "precise" compact support of the $\bar{\partial}$ -problem in strictly pseudoconvex domains and some consequences. (Italian summary) **(82j:32044)**

Leinartas, E. K. A generalization of Hadamard composition to functions of several complex variables. (Russian) **(82f:32040)**

Ōuchi, Sumao. An integral representation of singular solutions of linear partial differential equations in the complex domain. **(82c:35002)**

Šalaginov, S. D. The Cauchy problem for the Laplace equation in a complex space. (Russian) **(82f:35041)**

Šatalov, V. E. See **Sternin, B. Ju.**, **(82a:58048)**

Sternin, B. Ju. (with Šatalov, V. E.) Legendre uniformization of multivalued analytic functions. (Russian) **(82a:58048)**

Tarhanov, N. N. Integral representation of solutions of systems of first-order linear partial differential equations and some of its applications. (Russian) **(82j:35030)**

32A27 Local theory of residues [See also 32C30.]

Južakov, A. P. Calculation of the sum of values of a polynomial in solutions of a system of algebraic equations. (Russian) **82j:32010**

Lupaciuolo, Guido. On the argument principle in multidimensional complex manifolds. (Italian summary) **82b:32020**

secondary classifications:

Laurent-Thiebaut, Christine Produits de courants et formule des résidus. (English summary) **82j:58007**

32A30 Other generalizations of function theory of one complex variable (should also be assigned at least one classification number from Section 30) (For functions of several hypercomplex variables, see 30G35.)

Amar-Saroste, Denise Étude de suites d'interpolation dans le polydisque. (English summary) **82b:32007**

Bavrin, I. I. On extremal problems in the classes $Q_{A_1}, M_{A_1}, N_{A_1}, R_{A_1}$. (Russian. Azerbaijani and English summaries) **82j:32011**

Bolotov, V. A. Correspondence between roots and coefficients of multidimensional systems of algebraic equations. (Russian) **82j:32012**

Bondar, A. V. On mappings having a constant extension operator along cones. (Russian. English summary) **82g:32007**

Forelli, Frank A necessary condition on the extreme points of a class of holomorphic functions. II. **82k:32021**

Hohlov, Ju. E. See **Tihonov, A. P.**, **82c:32005**

Janušauskas, A. I. Composition of singularities of functions of two complex variables. (Russian) **82c:32008**

Kakitev, V. A. On the connection between γ -factorization of a function of two variables and its factorization. (Russian) **82j:32013**

Kuliev, Dž. P. Continuous extensions of pseudanalytic functions of several variables. (Russian. Azerbaijani and English summaries) **82k:32022**

Kuskovskii, I. N. A generalized Cauchy-Riemann system with two independent complex variables. (Russian) **82g:32008**

Tihonov, A. P. (with **Hohlov, Ju. E.**) Biholomorphy of solutions of an inverse boundary value problem in C^n . (Russian) **82c:32005**

Znamenskii, S. V. Analogue of Leont'ev's theorem for Euler operators and the Vostrecov formula for a strongly star-shaped domain $D \subset C^n$. (Russian) **82m:32004**

secondary classifications:

Brodskiĭ, A. A. Some properties of solutions of the Löwner-Kufarev equation in the space C^n . (Russian) **82c:32028**

Finster, C. See **Izvercian, P. N.**, **(82m:30049)**

Florian, H. (with **Püngel, Jürgen**) Riemannfunktionen als Lösungen gewöhnlicher Differentialgleichungen. (English summary) **(82d:35032)**

Izvercian, P. N. (with **Finster, C.**) H -holomorphic functions on polynomial algebras with a radical. (Romanian. German summary) **(82m:30049)**

Jurzanova, T. K. The Hilbert boundary value problem for a "logarithmic hypercone". (Russian) **(82h:32009)**

Kopaev, A. V. On the expansion of holomorphic functions of two complex variables in quasipower bases. (Russian) **(82j:32004)**

Lacabizze, T. I. A class of holomorphic functions of several complex variables. (Russian. Georgian and English summaries) **(82f:32005)**

Püngel, Jürgen See **Florian, H.**, **(82d:35032)**

Reich, Ludwig Neuere Ergebnisse über kontinuierliche Iteration formaler Potenzreihen. **(82i:13026)**

Sparing, H.-D. Analytische Operatoren vektorieller Veränderlicher in reellen und komplexen Banachräumen. II. **(82c:46057a)**

Analytische Operatoren vektorieller Veränderlicher in reellen und komplexen Banachräumen. III. **(82c:46057b)**

Tung, S. H. Extension of Bernstein's theorem. **(82k:32013)**

Tutschke, Wolfgang Boundary value problems for generalized analytic functions of several complex variables. **(82f:30053)**

32A35 H^p -spaces [See also 32M15, 42B30, 43A85, 46J15.]

Amar, Éric Extension de fonctions analytiques avec estimation. **82j:32014**

(with **Charpentier, Philippe**) Extensions dans les classes de Hardy de fonctions holomorphes définies sur une sous-variété du bidisque. (English summary) **82g:32009**

(**Berndtsson, Bo**) See **Skoda, Henri**, **82i:32018**

Carmichael, Richard D. (with **Richters, Stephen P.**) Growth of H^p functions in tubes. **82k:32008**

Chang, Sun Yung A. (with **Fefferman, Robert**) A continuous version of duality of H^1 with BMO on the bidisc. **82a:32009**

Charpentier, Philippe See **Amar, Éric**, **82g:32009**

Coifman, R. R. (with **Rochberg, R. H.**; **Taibleson, Mitchell H.**; **Weiss, Guido**) Introduction. **82g:32010**

(with **Rochberg, R. H.**) Representation theorems for holomorphic and harmonic functions in L^p . **82j:32015**

Faour, Nazih See **Khalil, Roshdi**, **82i:32017**

Fefferman, Robert See **Chang, Sun Yung A.**, **82a:32009**

Gaveau, Bernard Valeurs frontières des fonctions harmoniques et holomorphes. Cas de la boule de C^n . (English summary) **82j:32016**

Valeurs au bord des fonctions harmoniques ou holomorphes et de leurs dérivées. I. (English summary) **82c:32007**

Intégrales de courbure et potentiels sur les hypersurfaces de C^n ou de la boule. (English summary) [Curvature integrals and potentials on hypersurfaces of C^n or in the ball] **82k:32023**

(with **Malliavin, Paul**) Courbure des surfaces de niveau des fonctions holomorphes bornées dans la boule. (English summary) [Curvature of level surfaces of bounded holomorphic functions in the ball] **82m:32005**

Gvaradze, M. I. Multipliers of a class of analytic functions, defined on a polydisc. (Russian) **82f:32010**

Khalil, Roshdi (with **Faour, Nazih**) The spectrum of a class of Toeplitz operators. (Arabic summary) **82i:32017**

Lee, Hsuan Pei (with **Wermer, John**) Orthogonal measures for subsets of the boundary of the ball in C^2 . **82k:32024**

Li, Ta Chung Some interpolation properties. **82a:32010**

Malliavin, Paul See **Gaveau, Bernard**, **82m:32005**

Richters, Stephen P. See **Carmichael, Richard D.**, **82k:32008**

Rochberg, R. H. See **Coifman, R. R.**; et al., **82g:32010** and **Coifman, R. R.**, **82j:32015**

Sawyer, Eric Good/irreducible inner functions on a polydisc. (French summary)

82a:32011

Skoda, Henri Diviseurs d'aire bornée dans la boule de C^2 : réflexions sur un article de Bo Berndtsson. **82i:32018**

Taibleson, Mitchell H. See **Coifman, R. R.**; et al., **82g:32010**

Varopoulos, Nicholas Th. Zeros of H^p functions in several complex variables. **82d:32004**

Probabilistic approach to some problems in complex analysis. (French summary) **82k:32025**

Fonctions de la classe BMO et solution du problème $\bar{\partial}$, au bord des domaines pseudoconvexes. (English summary) **82b:32008**

Weiss, Guido See **Coifman, R. R.**; et al., **82g:32010**

Wermer, John See **Lee, Hsuan Pei**, **82k:32024**

Zarantonello, Sergio E. The sheaf of H^p -functions in product domains. **82k:32026**

Representation theorems for Hardy spaces. See **Coifman, R. R.**; et al., **82g:32010**

secondary classifications:

Alexander, H. On a minimum principle in several complex variables. **(82g:32004)**

Chang, Sun Yung A. A generalized area integral estimate and applications. **(82d:42014)**

Cowen, Carl C. (with **Rubel, Lee A.**) A joint spectrum for shift invariant subspaces of H^2 of the polydisc. **(82b:47043)**

Crocker, David (with **Raeburn, Iain**) Toeplitz operators on certain weakly pseudoconvex domains. **(82j:47043)**

Dahlberg, Björn E. J. Weighted norm inequalities for the Lusin area integral and the nontangential maximal functions for functions harmonic in a Lipschitz domain. **(82f:31003)**

Debiard, Amédée Espaces H^p au dessus de l'espace hermitien hyperbolique de C^n ($n > 1$). II. (English summary) **(82m:43016)**

Delsarte, Philippe (with **Genin, Yves V.**; **Kamp, Yves G.**) Planar least-squares inverse polynomials. II. Asymptotic behavior. **(82a:93064)**

Genin, Yves V. See **Delsarte, Philippe**; et al., **(82a:93064)**

Gundy, Richard F. Inégalités pour martingales à un et deux indices: l'espace H^p . **(82g:60059)**

Jewell, Nicholas P. Toeplitz operators on the Bergman spaces and in several complex variables. **(82a:47028)**

Kamp, Yves G. See **Delsarte, Philippe**; et al., **(82a:93064)**

Krantz, Steven G. Holomorphic functions of bounded mean oscillation and mapping properties of the Szegő projection. **(82i:32010)**

Kronstadt, Eric P. (with **Neville, Charles W.**) Interpolation by vector-valued functions of class H^p and absolutely convergent sequences of interpolating functions. (Italian summary) **(82b:32022)**

Lopulianskiĭ, O. V. The holomorphy of functions in a given domain. (Russian)

(82k:32002)

Neville, Charles W. See **Kronstadt, Eric P.**, **(82b:32022)**

Raeburn, Iain See **Crocker, David**, **(82j:47043)**

Rubel, Lee A. See **Cowen, Carl C.**, **(82b:47043)**

Sarin, V. I. Analytic continuation with respect to a parameter and multiplication of generalized functions. (Russian) **(82m:46043)**

Schempp, Walter Schwartz kernels on Siegel II domains. **(82c:32036)**

Sharma, S. D. See **Singh, R. K.**, **(82g:47023)**

Singh, R. K. (with **Sharma, S. D.**) Composition operators and several complex variables. **(82g:47023)**

Taylor, John Christopher Fine and admissible convergence for the unit ball in C^n . **(82c:32043)**

32A40 Boundary behavior

Bonami, Aline (with **Lohoué, Noël**) À propos du théorème de Fatou sur certains domaines faiblement pseudo-convexes. **82j:32017**

Hulanicki, Andrzej (with **Ricci, F.**) A Tauberian theorem and tangential convergence for bounded harmonic functions on balls in C^n . **82c:32008**

Jurzanova, T. K. The Hilbert boundary value problem for a "logarithmic hypercone". (Russian) **82h:32009**

Kakitev, V. A. (with **Šelkovič, V. M.**) Riemann's problem for a p -cone in Vladimirov algebras. (Russian) **82h:32010**

Lohoué, Noël See **Bonami, Aline**, **82j:32017**

Morimoto, Mitsuo Analytic functionals on the Lie sphere. **82c:32006**

Nagel, Alexander (with **Wainger, Stephen**) Limits of bounded holomorphic functions along curves. **82j:32018**

(with **Stein, Elias M.**; **Wainger, Stephen**) Boundary behavior of functions

holomorphic in domains of finite type. **82k:32027**

Piven, N. N. An inverse boundary value problem for domains that are holomorphically equivalent to the bidisc. (Russian) **82k:32028**

Ricci, F. See **Hulanicki, Andrzej**, **82c:32008**

Ščehorskiĭ, A. I. Some differential properties of holomorphic mappings. (Russian)

82k:32012

Some boundary and solid properties of holomorphic functions in C^n . (Russian) **82h:32009**

Šelkovič, V. M. See **Kakitev, V. A.**, **82h:32010**

Stein, Elias M. See **Nagel, Alexander**; et al., **82k:32027**

Wainger, Stephen See **Nagel, Alexander**, **82j:32018** and **82k:32027**

secondary classifications:

Alexander, H. On a minimum principle in several complex variables. **(82g:32004)**

- Beauregard, Frank, Jr. Hölder estimates for the $\bar{\partial}$ equation with a support condition. (82b:32029)
- Globevnik, Josip (with Stout, Edgar Lee) Highly noncontinuable functions on convex domains. (French summary) (82c:32013)
- Sadullaev, A. The operator $(dd^c U)^n$ and inner functions in C^n . (Russian) (82b:32028)
- Stout, Edgar Lee See Globevnik, Josip. (82c:32013)
- Szisz, Árpád Inversion in the multiplier extension of admissible vector modules. (82c:46060)

32A45 Hyperfunctions [See also 46F15.]

- Blickensderfer-Ehlers, Arndt \mathcal{F} -microfonctions. 82i:32019
- Carmichael, Richard D. Distributional boundary values in $\mathcal{O}'_{L,p}$. IV. 82g:32011
- Kiselman, Christer O. How to recognize supports from the growth of functional transforms in real and complex analysis. 82f:32011
- Marti, Jean-André Théorèmes d'unicité sur les hyperfonctions analytiques par rapport à une des variables. (English summary) 82g:32012
- Žarinov, V. V. On an exact sequence of modules and the Bogoljubov "edge of the wedge" theorem. (Russian) 82f:32012

secondary classifications:

- Bronstein, M. D. Smoothness of roots of polynomials depending on parameters. (Russian) (82c:26018)
- Bros, Jacques Analytic structure of Green's functions in quantum field theory. (82b:81052)
- (with Iagolnitzer, D.) A fixed point approach to the Green's function of Φ_4^4 : local existence of the Borel transforms. (82m:81046)
- Brüning, Erwin The n -field-irreducible part of an n -point functional. (French summary) (82i:81070)
- de Calan, C. (with David, F.; Rivasseau, V.) Renormalization in the complete Mellin representation of Feynman amplitudes. (82i:81045)
- Cattapan, G. (with Lovitch, L.; Vanzani, V.) Minimally connected N -body equations for transition operators. (82i:81130)
- David, F. See de Calan, C.; et al. (82i:81045)
- Epstein, H. (with Glaser, V.; Iagolnitzer, D.) Some analyticity properties arising from asymptotic completeness in quantum field theory. (82j:81037)
- Gabber, Ofer The integrability of the characteristic variety. (82j:58104)
- Glaser, V. See Epstein, H.; et al. (82j:81037)
- Golovin, V. D. Hyperfunctions on analytic spaces. (Russian. Georgian and English summaries) (82f:32017)
- Iagolnitzer, D. Essential support theory and $u=0$ theorems. (82c:81071)
- Macrocausality, unitary and physical-region structure of the multiparticle S matrix. (82b:81121)
- See also Epstein, H.; et al. (82j:81037) and Bros, Jacques. (82m:81046)
- Ito, Yoshifumi Theory of analytic linear mappings. I. General theory. (82c:46050)
- Kashiwara, M. Faisceaux constructibles et systèmes holonomes d'équations aux dérivées partielles linéaires à points singuliers réguliers. (82c:58087)
- Kupsch, J. (with Pool, T. P.) Saturation of the Froissart bound. (Italian and Russian summaries) (82b:81115)
- Lovitch, L. See Cattapan, G.; et al. (82i:81130)
- Marshall, Bernard Differentiability of distributions at a single point. (82j:46054)
- Morimoto, Mitsuo (with Yoshino, Kunio) Some examples of analytic functionals with carrier at infinity. (82c:46051)
- Pool, T. P. See Kupsch, J. (82b:81115)
- Rivasseau, V. See de Calan, C.; et al. (82i:81045)
- Ruijsenaars, Simon N. M. Integrable quantum field theories and Bogolubov transformations. (82j:81042)
- Vanzani, V. See Cattapan, G.; et al. (82i:81130)
- Varopoulos, Nicholas Th. Fonctions de la classe BMO et solution du problème $\bar{\partial}_b$ au bord des domaines pseudoconvexes. (English summary) (82b:32008)
- Veržbalović, T. A. Associative multiplication of certain homogeneous generalized functions. (Russian) (82c:46061)
- Yoshino, Kunio See Morimoto, Mitsuo. (82c:46051)
- Zamolodchikov, Aleksander B. Tetrahedron equations and the relativistic S -matrix of straight-strings in $2+1$ -dimensions. (82k:81081)
- Žarinov, V. V. Analytic representations of a class of analytic functionals that contains Fourier hyperfunctions. (Russian) (82k:46064)
- Fourier-ultrahyperfunctions. (Russian) (82k:46062)
- On quasiasymptotics of Fourier hyperfunctions. (Russian. English summary) (82k:46063)

32A99 None of the above, but in this section

secondary classifications:

- Bazylev, V. T. On partial mappings of Euclidean spaces. (Russian. English summary) (82j:53009)
- Božinov, Nikolai S. (with Dimovski, Ivan H.) A generalization of a Raichinov's representation formula for the commutator of integration operators. (82m:47019)
- Carmichael, Richard D. Analytic functions related to the distributions of exponential growth. (82d:46059)
- Dimovski, Ivan H. See Božinov, Nikolai S. (82m:47019)
- Džakov, P. B. (with Mitjagin, B. S.) The structure of polynomial ideals in the algebra of entire functions. (82c:32006)
- Erugin, N. P. The equations $w'' = f(w', w, z)$ with an irrational right hand side. (Russian) (82m:34006)
- Gérard, R. (with Sibuya, Yasutaka) Étude de certains systèmes de Pfaff avec singularités. (82m:34006a)
- See also Ramis, Jean-Pierre. (82m:34006b)

- Kräuter, Arnold Richard Wurzeln und analytische Iteration formal-biholomorpher Abbildungen. (82b:58041)
- Mitjagin, B. S. See Džakov, P. B. (82c:32006)
- Ramis, Jean-Pierre A propos du théorème de Borel-Ritt à plusieurs variables. (82m:34006b)
- Rudin, Walter Unitarily invariant algebras of continuous functions of spheres. (82i:46080)
- Sibuya, Yasutaka A linear Pfaffian system at an irregular singularity. (82b:13019)
- See also Gérard, R. (82m:34006a) and Ramis, Jean-Pierre. (82m:34006b)
- Tsumo, Yoshimichi Holomorphic continuation of solutions of partial differential equations across the multiple characteristic surface. (82f:35029)

32Bxx Local analytic geometry [See also 13-XX and 14-XX.]

Björk, J.-E. ★Rings of differential operators. 82g:32013

32B05 Analytic algebra and generalizations, preparation theorems

- Becker, Joseph A. (with Zame, William R.) Applications of functional analysis to the solution of power series equations. 82k:32029
- Bochnak, Jacek (with Kucharz, Wojciech; Shiota, Masahiro) On equivalence of ideals of real global analytic functions and the 17th Hilbert problem. 82i:32020
- Corach, Gustavo (with Laroitonda, Angel Rafael) Algebras of differentiable functions. (Spanish) 82j:32019
- Kucharz, Wojciech See Bochnak, Jacek; et al. 82i:32020
- Laroitonda, Angel Rafael See Corach, Gustavo. 82j:32019
- Raimondo, Mario On the global ring of Nash functions. (Italian summary) 82f:32013
- Scheja, Günter (with Wiebe, Hartmut) Zur Chevalley-Zerlegung von Derivationen. (English summary) 82d:13008
- Shiota, Masahiro See Bochnak, Jacek; et al. 82i:32020
- Sugatani, Takasi Rings of convergent power series and Weierstrass preparation theorem. 82i:32021
- Wiebe, Hartmut See Scheja, Günter. 82d:13008
- Zame, William R. See Becker, Joseph A. 82k:32029

secondary classifications:

- Bruna, Joaquim Analytic Denjoy-Carleman algebras. (Spanish. English summary) (82d:30023)
- An extension theorem of Whitney type for non-quasi-analytic classes of functions. (82c:58024)
- Corach, Gustavo (with Laroitonda, Angel Rafael) Differentiable compactifications. (Spanish) (82f:58017)
- Laroitonda, Angel Rafael See Corach, Gustavo. (82f:58017)
- Ludlow-Wiechers, J. The C^k preparation theorem and local description of zeros of functions. (Spanish) (82d:58010)
- Merrien, Jean Applications des faisceaux analytiques semi-cohérents aux fonctions différentiables. (English summary) (82g:58015)
- Michor, P. The division theorem on Banach spaces. (82m:58008)
- Platte, Erich Differentielle Eigenschaften der Invarianten regulärer Algebren. (82d:13021)
- Zur endlichen homologischen Dimension von Differentialmoduln. (English summary) (82d:13015)
- Reich, Ludwig Neuere Ergebnisse über kontinuierliche Iteration formaler Potenzreihen. (82i:13026)
- Šamojan, F. A. Division theorems and closed ideals in algebras of analytic functions with a majorant of finite growth. (Russian. Armenian and English summaries) (82c:30073)
- Sánchez-Fernández, Carlos Algebraization of transcendental equations with simple spectrum. (Spanish) (82k:46077)
- Tougeron, Jean-Claude Fonctions composées différentiables: cas algébrique. (82c:58020)
- Verdera, Joan Finitely generated, projective extensions of an m -convex algebra. (Spanish) (82i:46073)

32B10 Germs of analytic sets

- Landis, E. E. Estimates of the variations of lesser value sets of a smooth function in the neighborhood of a minimum point. (Russian. English summary) 82b:32010
- Reich, Ludwig Analytische und fraktionale Iteration formal-biholomorpher Abbildungen und Differenzenrechnung. 82h:32011
- Teissier, Bernard Variétés polaires locales et conditions de Whitney. (English summary) 82m:32006

secondary classifications:

- Bosch, Siegfried A rigid analytic version of M. Artin's theorem on analytic equations. (82k:32067)
- Bruce, J. W. On contact of hypersurfaces. (82c:58023)
- Tung, Chia Chi Minimal equations, global reducibility of holomorphic functions, and relative rationality of analytic sets. (82c:32004)

32B15 Analytic subsets of affine space

- Besnault, Jacques (with Dolbeault, Pierre) Sur les bords d'ensembles analytiques complexes dans $P^n(C)$. 82j:32020
- Dolbeault, Pierre See Besnault, Jacques. 82j:32020

secondary classifications:

- Varčenko, A. N. Obstructions to local equivalence of distributions. (82k:58012)

32B20 Semi-analytic sets and subanalytic sets

- Bierstone, Edward (with Schwarz, Gerald W.) Division et prolongement de fonctions C^∞ . (English summary) **82a:32013**
- Denkowska, Zofia La continuité de la section d'un ensemble semi-analytique et compact. **82c:32007**
- Grin', A. N. A fibering connected with a local structure of an analytic set. (Russian) **82a:32014**
- Reichard, Klaus C^∞ -Diffeomorphismen semianalytischer und subanalytischer Mengen. **82f:32014**
- Schwarz, Gerald W. See Bierstone, Edward, **82a:32013**
- Tamm, Martin Subanalytic sets in the calculus of variation. **82h:32012**

secondary classifications:

- Brunovský, Pavol Regular synthesis and singular extremals. **(82c:49027)**
- Coleff, N. (with Herrera, M.; Lieberman, D.) Algebraic cycles as residues of meromorphic forms. **(82i:32031)**
- Hardt, Robert M. (with McCrory, Clint G.) Steenrod operations in subanalytic homology. **(82h:55019)**
- Herrera, M. See Coleff, N.; et al., **(82i:32031)**
- Lieberman, D. See Coleff, N.; et al., **(82i:32031)**
- Łojasiewicz, Stanisław Remarque sur les biholomorphismes polynomiales. (English and Russian summaries) **(82d:32020)**
- McCrory, Clint G. See Hardt, Robert M., **(82h:55019)**
- Prätzel-Wolters, Dieter Brunovsky equivalence of system matrices: the reachable case. **(82f:93033)**
- Tancredi, Alessandro (with Tognoli, Alberto) On a decomposition of the points of noncoherence of a real-analytic space. (Italian. English summary) **(82i:32027)**
- Tognoli, Alberto See Tancredi, Alessandro, **(82i:32027)**
- Zaslavsky, Thomas The geometry of root systems and signed graphs. **(82g:05012)**

32B25 Triangulation and related questions

32B30 Local singularities [See also 14B05, 32C40, 32C42.]

- Aomoto, Kazuhiko Une correction et un complément à l'article: "Les équations aux différences linéaires et les intégrales des fonctions multiformes" [J. Fac. Sci. Univ. Tokyo Sect. IA Math. **22** (1975), no. 3, 271–297; MR **58** #22688c]. **82h:32013**
- Čmutov, S. V. Monodromy groups of singularities of functions of two variables. (Russian) **82i:32022**
- Françoise, Jean-Pierre Systèmes maximaux d'une singularité quasi homogène. (English summary) **82g:32014**
- Greuel, Gert-Martin Dualität in der lokalen Kohomologie isolierter Singularitäten. **82c:32009**
- Gusein-Zade, S. M. Distinguished bases of simple singularities. (Russian) **82f:32015**
- Hamm, Helmut A. On the vanishing of local homotopy groups for isolated singularities of complex spaces. **82i:32023**
- de la Harpe, P. (with Siegfried, P.) Singularités de Klein. **82c:32010**
- Horavský, A. G. Newton polyhedra and the Euler-Jacobi formula. (Russian) **82g:32015**
- Sur les racines complexes des systèmes d'équations algébriques comportant peu de termes. (English summary) **82i:32024**
- Kennedy, Gary Griffiths' integral formula for the Milnor number. **82j:32021**
- Langevin, Rémi (with Lê Dũng Tráng) Courbure au voisinage d'une singularité. (English summary) **82i:32025**
- Lê Dũng Tráng See Langevin, Rémi, **82i:32025**
- Livsic, I. S. Automorphisms of the complement to the bifurcation set of functions for simple singularities. (Russian) **82h:32014**
- Oka, Mutsuo Correction to: "Deformation of Milnor fiberings" [J. Fac. Sci. Univ. Tokyo Sect. IA Math. **20** (1973), 397–400; MR **48** #11564]. **82c:32011**
- Pham, Frédéric Remarque sur l'équivalence des fonctions de phase. (English summary) **82f:32016**
- Sedyh, V. D. Structure of the convex hull of a space curve. (Russian. English summary) **82j:32022**
- Siegfried, P. See de la Harpe, P., **82c:32010**
- Teixidor, J. Sur le calcul du nombre de Milnor. **82h:32011**
- Varčenko, A. N. Asymptotic Hodge structure on vanishing cohomology. (Russian) **82m:32007**
- Yomdin, Y. Some estimates for a decomposition of hypersurface singularities into the simplest ones. **82h:32015**

secondary classifications:

- Brasselet, Jean-Paul (with Schwartz, Marie-Hélène) Compléments à l'étude des classes de Chern d'une variété à singularités. **(82g:57008)**
- Briançon, J. (with Henry, Jean-Pierre-Georges) Équisingularité générique des familles de surfaces à singularité isolée. (English summary) **(82j:14007)**
- Brjuno, A. D. *Локальный метод нелинейного анализа дифференциальных уравнений. (Russian) [A local method of nonlinear analysis for differential equations] **(82h:34033)**
- Bronstein, M. D. Smoothness of roots of polynomials depending on parameters. (Russian) **(82c:26018)**
- Ebeling, Wolfgang Quadratische Formen und Monodromiegruppen von Singularitäten. **(82j:14003)**
- Feldman, G. L. Global dimension of rings of differential operators. (Russian) **(82h:16023)**
- Givental', A. B. Convolution of invariants of groups generated by reflections that are associated to simple singularities of functions. (Russian) **(82f:58019)**
- Gomberg, A. M. ω -determinacy of germs of analytic mappings. (Russian. English summary) **(82f:58020)**
- Hénaut, Alain Cycles et cône tangent de Zariski. **(82a:32027)**

- Henry, Jean-Pierre-Georges See Briançon, J., **(82j:14007)**
- Ishimura, Ryuichi Homomorphismes du faisceau des germes de fonctions holomorphes dans lui-même et opérateurs différentiels. II. **(82h:32014)**
- Kazarnovskii, B. Ja. On zeros of exponential sums. (Russian) **(82i:32014)**
- Kirillov, A. N. Formula for calculating the integral cohomology of the boundary of an isolated hypersurface singularity. (Russian) **(82h:14002)**
- Lê Dũng Tráng Surfaces minimales et singularités. **(82f:53009)**
- Lipman, Joseph (with Teissier, Bernard) Pseudorational local rings and a theorem of Briançon-Skoda about integral closures of ideals. **(82f:14004)**
- Pignoni, Roberto Morse functions and the strict Whitney condition. (Italian summary) **(82c:58006)**
- Schwartz, Marie-Hélène See Brasselet, Jean-Paul, **(82g:57008)**
- Słodowy, Peter *Four lectures on simple groups and singularities. **(82h:14002)**
- *Simple singularities and simple algebraic groups. **(82g:14037)**
- Smirnov, V. A. Singularities of Feynman amplitudes in momentum space. (Russian. English summary) **(82k:81022)**
- Teissier, Bernard See Lipman, Joseph, **(82f:14004)**

32B99 None of the above, but in this section

- Belickii, G. R. (with Kučko, L. P.) ω -determinacy of germs of analytic mappings. (Russian) **82c:32012**
- Kučko, L. P. See Belickii, G. R., **82c:32012**

secondary classifications:

- Chih, A. K. Bezout's theorem in space, theories of functions. Solution of systems of algebraic equations. (Russian) **(82k:14008)**
- Dineen, Seán Holomorphic germs on compact subsets of locally convex spaces. **(82d:46053)**
- Kobeltbauer, Helmut Franz *Stetige Iterationen und deren invariante Funktionen bei Kontraktionen des C^1 . (German) [Continuous iterations and their invariant functions in contractions of C^1] **(82i:39003)**
- Kuo, Tzee Char The modified analytic trivialization of singularities. **(82d:58012)**
- Rizza, Giovanni Battista On the complex differentials $\partial\bar{\partial}$, $\partial\partial$, $\bar{\partial}\bar{\partial}$. (Italian summary) **(82i:32021)**
- Schwartz, Laurent *Semi-martingales sur des variétés, et martingales conformes sur des variétés analytiques complexes. (French) [Semimartingales on manifolds, and conformal martingales on complex analytic manifolds] **(82m:60051)**
- Tognoli, Alberto *Algebraic geometry and Nash functions. **(82g:14029)**

32Cxx General theory of analytic spaces

32C05 Real-analytic manifolds, real-analytic spaces [See also 14G30, 58A07.]

- Coljoiu, M. Cohomology with compact supports for real analytic spaces. (Italian summary) **82i:32026**
- Faran, James J., V. Lewy's curves and chains on real hypersurfaces. **82h:32016**
- Pascu, Paul (with Pascu, Eugen) Some invariants on real-analytic spaces. (Italian summary) **82g:32016**
- Golovin, V. D. Hyperfunctions on analytic spaces. (Russian. Georgian and English summaries) **82f:32017**
- Jacobowitz, Howard Mappings between CR manifolds. **82j:32023**
- Merrien, Jean Faisceaux analytiques semi-cohérents. **82f:32018**
- Pascu, Eugen See Flondor, Paul, **82g:32016**
- Spallek, Karlheinz Strong approximation in real analytic coherent sheaves. (Italian summary) **82f:32019**
- Tancredi, Alessandro Some properties of analytic manifolds with boundary. (Italian. English summary) **82c:32013**
- (with Tognoli, Alberto) On a decomposition of the points of noncoherence of a real-analytic space. (Italian. English summary) **82i:32027**
- Tognoli, Alberto See Tancredi, Alessandro, **82i:32027**

secondary classifications:

- Akbulut, Selman (with King, Henry Churchill) A topological characterization of real algebraic varieties. **(82a:57017)**
- (with Taylor, Laurence R.) A topological resolution theorem. **(82a:57018)**
- Benedetti, R. (with Tognoli, Alberto) Approximation theorems in differential topology. II. (Italian. English summary) **(82j:53052)**
- Bochnak, Jacek (with Kucharz, Wojciech; Shiota, Masahiro) On equivalence of ideals of real global analytic functions and the 17th Hilbert problem. **(82i:32020)**
- van Est, Willem T. Sur le groupe fondamental des schémas analytiques de variété à une dimension. (English summary) **(82c:57014a)**
- Erratum: "Sur le groupe fondamental des schémas analytiques de variété à une dimension". **(82c:57014b)**
- King, Henry Churchill See Akbulut, Selman, **(82a:57017)**
- Kucharz, Wojciech See Bochnak, Jacek; et al., **(82i:32020)**
- Shiota, Masahiro See Bochnak, Jacek; et al., **(82i:32020)**
- Taylor, Laurence R. See Akbulut, Selman, **(82a:57018)**
- Tognoli, Alberto See Benedetti, R., **(82j:53052)**

32C10 Complex manifolds [For almost complex manifolds, see 53C15.]

- Kobayashi, Shoshichi Recent results in complex differential geometry. **82m:32008**
- Mizuhara, Akira Three-dimensional Hopf manifolds. (Japanese summary) **82i:32028**

secondary classifications:

- Ambrogio, Elisabetta (with Romagnoli, Daniela) An elementary example of a Moishezon

- manifold that is not algebraic. (Italian. English summary) (82e:14047)
- Ganev, M. Projective structures on compact complex manifolds: geometric theory. I. (82e:53056a)
- Projective structures on compact complex manifolds: geometric theory. II. (82e:53056b)
- Gelfand, I. M. (with Gindikin, S. G.; Graev, M. I.) Integral geometry for certain one-dimensional fibrations over projective space. (Russian) (82g:53000)
- (with Gindikin, S. G.; Graev, M. I.) Integral geometry for one-dimensional fibrations of a general form over $\mathbb{R}P^n$. (Russian) (82g:53001)
- Gindikin, S. G. See Gelfand, I. M.; et al. (82g:53000) and (82g:53001)
- Graev, M. I. See Gelfand, I. M.; et al. (82g:53000) and (82g:53001)
- Holmann, Harald On the stability of holomorphic foliations. (82f:57020)
- Kulkarni, Ravindra S. (with Wood, John W.) Topology of nonsingular complex hypersurfaces. (82j:57000)
- Mostow, G. D. (with Siu, Yum Tong) A compact Kähler surface of negative curvature not covered by the ball. (82f:53075)
- Ramis, Jean-Pierre Une remarque sur les complexes différentiels de fibrés holomorphes. (English summary) (82f:32044)
- Romagnoli, Daniela See Ambrogio, Elisabetta, (82e:14047)
- Siu, Yum Tong See Mostow, G. D., (82f:53075)
- Takegoshi, Kenshō A generalization of vanishing theorems for weakly 1-complete manifolds. (82f:32046)
- Tsukada, Kazumi Eigenvalues of the Laplacian on Calabi-Eckmann manifolds. (82j:58111)
- Ward, Richard Samuel Self-dual space-times with cosmological constant. (82g:83004)
- Wood, John W. See Kulkarni, Ravindra S., (82j:57000)
- 32C15 Complex spaces**
- Flondor, Paul Holomorphic spaces. 82g:32017
- Furushima, Mikiō Remarks on semiproper equivalence relations on complex spaces. (82j:32029)
- Horst, Camilla Konstruktion komplexer Räume mit vorgegebenen globalen Eigenschaften. 82f:32020
- Lee, Heisook Azumaya algebras of a complex analytic space. 82m:32009
- Retter, Kurt Relative complex Quotient. (English summary) 82e:32030
- secondary classifications:
- Ancona, Vincenzo Sur l'équivalence des voisinages des espaces analytiques contractibles. (Italian and English summaries) (82e:32019)
- Hatvany, Csaba Trivial regions of infinitesimal deformations. (82h:32048)
- Horst, Camilla Über Bilder projektiv-algebraischer Räume. (82h:32020)
- O'Brian, Nigel R. (with Toledo, Domingo; Tong, Yue Lin L.) The trace map and characteristic classes for coherent sheaves. (82f:32021)
- Toledo, Domingo See O'Brian, Nigel R.; et al. (82f:32021)
- Tong, Yue Lin L. See O'Brian, Nigel R.; et al. (82f:32021)
- Urata, Toshio Holomorphic automorphisms and cancellation theorems. (82h:32029)
- 32C20 Normal analytic spaces**
- Savel'ev, I. V. Topology of the complex-analytic normalization. (Russian) 82j:32024
- secondary classifications:
- Idà, Monica (with Manaresi, Mirella) On the branches of a complex space. (82h:32013)
- Manaresi, Mirella See Idà, Monica, (82h:32013)
- 32C25 Analytic subsets and submanifolds**
- Fujita, Osamu Sur les systèmes de fonctions holomorphes de plusieurs variables complexes. II. Points critiques des applications. 82e:32008
- Ohsawa, Takeo Analyticity of complements of complete Kähler domains. 82j:32025
- Rudin, Walter The finiteness of compact varieties in \mathbb{C}^n . 82e:32014
- Sibony, Nessim (with Wong, Pit Mann) Some results on global analytic sets. 82h:32017
- Wong, Pit Mann See Sibony, Nessim, 82h:32017
- secondary classifications:
- Demailly, Jean-Pierre Construction d'hypersurfaces irréductibles avec lieu singulier donné dans \mathbb{C}^n . (82f:32007)
- Ronkin, A. L. Distribution of zeros of quasipolynomials of several variables. (Russian) (82h:32003)
- Takeuchi, Shigeru Equivariant complexifications of Cauchy-Riemann actions. (82f:32047)
- 32C30 Integration on analytic sets and spaces, currents** (For local theory, see 32A25 or 32A27.)
- Coleff, N. (with Herrera, M.; Lieberman, D.) Algebraic cycles as residues of meromorphic forms. 82e:32031
- Herrera, M. See Coleff, N.; et al., 82e:32031
- Lieberman, D. See Coleff, N.; et al., 82e:32031
- Ofman, Salomon Transformée de Radon et intégrale sur les cycles analytiques compacts de certains ouverts de l'espace projectif complexe. (English summary) 82e:32009
- Intégrale sur les cycles analytiques compacts d'une variété algébrique projective complexe privée d'un point. (English summary) 82j:32026
- secondary classifications:
- Griffiths, Phillip A. (with King, James R.) ★Теория Неванлинны и голоморфные отображения алгебраических многообразий. (Russian) [Nevanlinna theory and holomorphic mappings between algebraic varieties] (82d:32019)
- Grušan, Lawrence La géométrie globale des ensembles analytiques dans \mathbb{C}^n . (82f:32009)
- King, James R. See Griffiths, Phillip A., (82d:32019)
- Lin, S. C. Euclidean electromagnetic field as Itô's random current: a simple proof of Markov property. (82f:81049)
- 32C35 Analytic sheaves and cohomology groups** [See also 14Fxx, 18F20, 55N30.]
- Bănică, Constantin (with Putinar, Mihai; Schumacher, Georg) Variation der globalen Ext in Deformationen kompakter komplexer Räume. 82e:32015
- (with Stoia, Manuela) Gorenstein points of a flat morphism of complex spaces. 82j:32032
- Buchner, M. (with Fritzsche, K.; Sakai, Takashi) Geometry and cohomology of certain domains in the complex projective space. 82k:32030
- Darko, Patrick W. A vanishing theorem for some cohomology groups with bounds. 82j:32027
- Ermine, Jean-Louis Cohérence de certaines images directes à supports propres dans le cas d'un morphisme fortement p -convexe. 82k:32031
- Fritzsche, K. See Buchner, M.; et al., 82k:32030
- Kajiura, Joji (with Koyanagi, Ryohei) Propriété de Stein et l'existence de solutions globales holomorphes d'un système d'équations différentielles à paramètres complexes. 82j:32032
- Kazama, Hideaki (with Umeno, Takashi) On a certain holomorphic line bundle over a compact non-Kähler complex manifold. 82d:32024
- Kori, Tosiaki Cohomologie de de Rham au bord d'un domaine fortement pseudoconvexe. 82m:32010
- Koyanagi, Ryohei See Kajiura, Joji, 82j:32032
- Leistner, Dietmar Cohomologietheorie mit Schranken für pseudokonvexe und pseudokonkave komplexe Räume. 82e:32016
- O'Brian, Nigel R. (with Toledo, Domingo; Tong, Yue Lin L.) The trace map and characteristic classes for coherent sheaves. 82f:32021
- (with Toledo, Domingo; Tong, Yue Lin L.) Hirzebruch-Riemann-Roch for coherent sheaves. 82f:32022
- (with Toledo, Domingo; Tong, Yue Lin L.) Grothendieck-Riemann-Roch for complex manifolds. 82m:32011
- Putinar, Mihai Functional calculus with sections of an analytic space. 82j:32033
- See also Bănică, Constantin; et al., 82e:32015
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- Schumacher, Georg See Bănică, Constantin; et al., 82e:32015
- Stoia, Manuela See Bănică, Constantin, 82j:32032
- Toledo, Domingo See O'Brian, Nigel R.; et al., 82f:32021; 82f:32022 and 82m:32011
- Tong, Yue Lin L. See O'Brian, Nigel R.; et al., 82f:32021; 82f:32022 and 82m:32011
- Umeno, Takashi See Kazama, Hideaki, 82d:32024
- Zarantonello, Sergio E. The sheaf of outer functions in the polydisc. 82h:32012
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- Coltoiu, M. Cohomology with compact supports for real analytic spaces. (Italian summary) (82i:32026)
- Flondor, Paul (with Pascu, Eugen) Some invariants on real-analytic spaces. (Italian summary) (82g:32016)
- Golovin, V. D. Dualizing complexes in analytic geometry. (Russian) (82f:32023)
- Homology theory and duality theorems. (Russian) (82f:32024)
- Gómez-Mont, Xavier Transversal holomorphic structures. (82j:53065)
- Mihai, Alexandru Un théorème de type Hamilton-Cayley pour la classe d'Atiyah. (82m:32025)
- Pascu, Eugen See Flondor, Paul, (82g:32016)
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- Zarantonello, Sergio E. The sheaf of H^p -functions in product domains. (82k:32026)
- 32C36 Local cohomology of analytic spaces**
- Melkhout, Zoghman Sur le problème de Hilbert-Riemann. 82a:32015
- Ramis, Jean-Pierre Les séries k -sommables et leurs applications. 82k:32033
- secondary classifications:
- Brenton, Lawrence Differentiably k -normal analytic spaces and extensions of holomorphic differential forms. (82k:32034)
- Golovin, V. D. Hyperfunctions on analytic spaces. (Russian. Georgian and English summaries) (82f:32017)
- 32C37 Duality theorems**
- Golovin, V. D. Dualizing complexes in analytic geometry. (Russian) 82f:32023
- Homology theory and duality theorems. (Russian) 82f:32024
- secondary classifications:
- Fujiki, Akira Duality of mixed Hodge structures of algebraic varieties. (82h:14007)
- Melkhout, Zoghman Sur le problème de Hilbert-Riemann. (82a:32015)
- 32C40 Singularities**
- Brenton, Lawrence Differentiably k -normal analytic spaces and extensions of holomorphic differential forms. 82k:32034
- Fujiki, Akira On the theory of singularities of complex analytic spaces. (Japanese) 82k:32035

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Idà, Monica (with Manaresi, Mirella) On the branches of a complex space. **82b:32013**

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Terao, Hiroaki Free arrangements of hyperplanes and unitary reflection groups. **82c:32018a**

Generalized exponents of a free arrangement of hyperplanes and

Shepherd-Todd-Brieskorn formula. **82c:32018b**

Varchenko, A. N. The integrality of the limit of the integral of the curvature along the boundary of an isolated singularity of a surface in \mathbb{C}^2 . (Russian) **82i:32036**

Watanabe, Kimio On plurigena of normal isolated singularities. I. **82i:32025**

Wirthmüller, K. Singularities determined by their discriminant. **82c:32011**

Yoshinaga, Etsuo (with Ohyana, Shigeki) Two-dimensional quasihomogeneous isolated singularities with geometric genus equal to two. **82g:32018**

(with Ohyana, Shigeki) Some examples of weakly elliptic singularities. **82i:32037**

secondary classifications:

Brasselet, Jean-Paul (with Schwartz, Marie-Hélène) Compléments à l'étude des classes de Chern d'une variété à singularités. (82g:57008)

Bros, Jacques (with Pesenti, Danielle) Fredholm theory in complex manifolds with complex parameters: analyticity properties and Landau singularities of the resolvent. (82c:81039)

Bruce, J. W. An upper bound for the number of singularities on a projective hypersurface. (82b:14014)

Dörfler, Peter Über Normalformen formaler autonomer Differentialsysteme mit quadratischen Anfangstermen. (82f:34006)

Gorjunov, V. V. Geometry of the bifurcation diagrams of simple projections onto a line. (Russian) (82i:58017)

Cohomology of braid groups of series C and D. (Russian) (82k:20085)

Kimura, Tatsuo Theory of prehomogeneous vector spaces. (Japanese) (82k:14049)

Knörrer, Horst Die Singularitäten vom Typ \tilde{D} . (82c:14005)

Lin, V. Ja. Artin braids and related groups and spaces. (Russian) (82h:20047)

Maghous, Fouzi Sur l'existence d'intégrales premières faibles pour un système de Pfaff "réduit". (English summary) (82g:58006)

Makanina, T. A. The occurrence problem for the braid group \mathfrak{B}_{n+1} when $n+1 > 5$. (Russian) (82c:20049)

Malgrange, Bernard Méthode de la phase stationnaire et sommation de Borel. (82a:41028)

Mebkhout, Zoghman Sur le problème de Hilbert-Riemann. (82a:32015)

Navarro Aznar, V. Conditions de Whitney et sections planes. (82b:32019)

Palamodov, V. P. Asymptotic behavior of oscillating integrals with an isolated stationary phase point. (Russian) (82g:58083)

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Pham, Frédéric Déploiements de singularités de systèmes holonomes. (English summary) (82c:58089)

Sasaki, Takeshi (with Takano, Kyoichi) On Appell's systems of hypergeometric differential equations. (82i:35030)

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Takano, Kyoichi Monodromy group of the system for Appell's F_4 . (82a:33008)

See also Sasaki, Takeshi, (82i:35030)

Tamm, Martin Subanalytic sets in the calculus of variation. (82h:32012)

Varchenko, A. N. Asymptotic behavior of holomorphic forms determines a mixed Hodge structure. (Russian) (82g:14010)

Watanabe, Toshihiro On a difference system of the integrals of Pochhammer. (82a:41050)

Zia, R. K. P. The variety of singularities in models of first order phase transitions. (82h:82020)

32C42 Stratified sets, etc. [See also 32Bxx.]

Guaraldo, Francesco (with Macri, Patrizia) Immersion theorems for analytic stratifications. (Italian. English summary) **82f:32026**

Macri, Patrizia See Guaraldo, Francesco, **82f:32026**

Navarro Aznar, V. Conditions de Whitney et sections planes. **82b:32019**

secondary classifications:

Bruce, J. W. Canonical stratifications of functions: the simple singularities. (82a:58011)

(with Giblin, P. J.) On real simple singularities. (82a:58012)

(with Giblin, P. J.) A stratification of the space of plane quartic curves. (82j:14022)

Giblin, P. J. See Bruce, J. W., (82a:58012) and (82j:14022)

Teissier, Bernard Variétés polaires locales et conditions de Whitney. (English summary) (82m:32006)

32C45 Modifications, resolution of singularities [See also 14E15.]

Ancona, Vincenzo (with Tomassini, Giuseppe) Géométrisation des modifications formelles. (Italian summary) **82d:32007**

Fujiki, Akira On the minimal models of complex manifolds. **82f:32027**

Horst, Camilla Über Bilder projektiv-algebraischer Räume. **82b:32020**

Kosarew, Siegmund Das formale Prinzip und Modifikationen komplexer Räume. **82k:32036**

Laufer, Henry B. On $\mathbb{C}P^1$ as an exceptional set. **82m:32012**

Ohyana, Shigeki On two-dimensional normal singularities of type A_n , D_n and E_n . **82c:32037**

Tomassini, Giuseppe See Ancona, Vincenzo, **82d:32007**

Yau, Stephen S. T. Kohn-Rossi cohomology and its application to the complex Plateau problem. I. **82k:32038**

secondary classifications:

Henry, Jean-Pierre-Georges (with Merle, Michel) Sections planes, limites d'espaces tangents et transversalité de variétés polaires. (English summary) (82c:32010)

Merle, Michel See Henry, Jean-Pierre-Georges, (82c:32010)

32C99 None of the above, but in this section

Ancona, Vincenzo Sur l'équivalence des voisinages des espaces analytiques contractibles. (Italian and English summaries) **82c:32019**

Ishimura, Ryuichi Homomorphismes du faisceau des germes de fonctions holomorphes dans lui-même et opérateurs différentiels. II. **82b:32014**

secondary classifications:

Holmann, Harald On the stability of holomorphic foliations. (82f:57020)

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32Dxx Analytic continuation

32D05 Domains of holomorphy

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Takase, Masahito Sur les G -enveloppes des espaces analytiques (K) -complets. **82m:32013**

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Aurich, Volker Das meromorphe Levi-Problem in unendlichdimensionalen Banachräumen. (82b:46053)

Bayoumi, Aboubakar The Levi problem and the radius of convergence of holomorphic functions on metric vector spaces. (82f:46052)

Buchner, M. (with Fritzsche, K.; Sakai, Takashi) Geometry and cohomology of certain domains in the complex projective space. (82k:32030)

Colombeau, Jean-François (with Mujica, Jorge) The Levi problem in nuclear Silva spaces. (82g:46085)

Fritzsche, K. See Buchner, M.; et al., (82k:32030)

Jennane, B. Groupes de cohomologie d'un fibré holomorphe à base et à fibre de Stein. (82j:32057)

Mujica, Jorge See Colombeau, Jean-François, (82g:46085)

Sakai, Takashi See Buchner, M.; et al., (82k:32030)

Takase, Masahito Sur les domaines intérieurement ramifiés (C) -pseudoconvexes. (82j:32031)

Valdivia, Manuel Interpolation in certain function spaces. (82i:46067)

32D10 Envelopes of holomorphy

Drużkowski, Ludwik M. A theorem on convex tube domains in infinite-dimensional topological vector spaces. (Russian summary) **82f:32028**

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Bedford, Eric Envelopes of continuous, plurisubharmonic functions. (82c:32028)

Stability of the polynomial hull of T^2 . (82j:32036)

Dwilewicz, Roman Stein domains in a neighbourhood of a Stein submanifold in a complex manifold. (Russian summary) (82j:32032)

Morales, Luiz A. Envelopes for types of holomorphy. (82f:46054)

Mujica, Jorge Domains of holomorphy in (DFC) -spaces. (82f:46055)

Takase, Masahito Sur les G -enveloppes des espaces analytiques (K) -complets. (82m:32013)

Zaine, Maria Carmelina F. Envelopes of Silva-holomorphy. (82f:46056)

32D15 Continuation of analytic objects

Airapetjan, R. A. (with Henkin, G. M.) Analytic continuation of CR-functions across the "edge of the wedge". (Russian) **82k:32039**

Caprioli, I. General method of using positivity in analytic continuations. (French summary) **82j:32029**

Henkin, G. M. See Airapetjan, R. A., **82k:32039**

Hill, C. Denson (with Taiani, Geraldine) Global uniqueness in the disc lifting problem. **82j:32038**

Landucci, Mario Boundary values of holomorphic functions and Cauchy problem for $\bar{\partial}$ operator in the polydisc. **82d:32005**

Rudin, Walter Holomorphic maps that extend to automorphisms of a ball. **82c:32012**

Sato, Shiro On the Nebenhülle of bounded domains. **82f:32038a**

Siciak, Józef A modified edge of the wedge theorem. **82k:32040**

Siu, Yum Tong Extension problems in several complex variables. **82d:32008**

Taiani, Geraldine See Hill, C. Denson, **82j:32038**

Yoshioka, Tsuneo Cohomologie à estimation L^2 et extension des fonctions holomorphes avec contrôle de la croissance. **82f:32029**

secondary classifications:

- Bell, Steven R.** Extendability of proper holomorphic mappings and global analytic hypoellipticity of the $\bar{\partial}$ -Neumann problem. (82b:32046)
Harris, Gary A. An algebraic question related to the function theory for real submanifolds of \mathbb{C}^n . (82a:32018)
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Lavrent'ev, M. M. Some problems of analytic continuation. (Russian) (82f:32001)
Sebbar, A. Prolongement des solutions holomorphes de certains opérateurs différentiels d'ordre infini à coefficients constants. (82f:35049)
Žarinov, V. V. On an exact sequence of modules and the Bogoljubov "edge of the wedge" theorem. (Russian) (82f:32012)

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- Adachi, Kenzō** Continuation of A^∞ -functions from submanifolds to strictly pseudoconvex domains. 82c:32020
Cima, Joseph A. (with Graham, Ian R.) On the extension of holomorphic functions with growth conditions across analytic subvarieties. 82j:32030
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secondary classifications:

- Bondar, A. V.** A holomorphy criterion for continuous mappings. (Russian) (82g:32005)

32D25 Non-Archimedean function theory

32D99 None of the above, but in this section

- Drużkowski, Ludwik M.** A generalization of the Malgrange-Zerner theorem. 82c:32021
Globevnik, Josip (with Stout, Edgar Lee) Highly noncontinuable functions on convex domains. (French summary) 82c:32013
Leinartas, E. K. Analytic continuation of the generalized Hadamard product. (Russian) 82c:32039
A generalization of Hadamard composition to functions of several complex variables. (Russian) 82c:32040
Łojasiewicz, Stanisław (with Siciak, Józef) On holomorphic extendibility of functions on generic real analytic submanifolds. (Russian summary) 82a:32016
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Stout, Edgar Lee See Globevnik, Josip, 82c:32013

secondary classifications:

- Johnson, Porter W.** (with Warnock, Robert Lee; Kaekebeke, M.) Dynamical equations for a Regge theory with crossing symmetry and unitarity. III. Crossing-symmetric representation with explicit Regge-pole terms. (82h:81125a)
Kaekebeke, M. See Johnson, Porter W.; et al., (82h:81125a)
Tsumo, Yoshimichi Localization of differential operators and holomorphic continuation of the solutions. (82d:35029)
Warnock, Robert Lee Dynamical equations for a Regge theory with crossing symmetry and unitarity. IV. Coupled channels. (82h:81125b)
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32Exx Holomorphic convexity

32E05 Holomorphically convex complex spaces, reduction theory

- Nardelli, Giuliana** (with Tancredi, Alessandro) Holomorphically convex compact subsets of an analytic space. (Italian. English summary) 82c:32014
Ohsawa, Takeo Weakly 1-complete manifold and Levi problem. 82j:32031
Takegoshi, Kenshō Weak and strong pseudoconvexities. 82f:32030
Tancredi, Alessandro See Nardelli, Giuliana, 82c:32014

secondary classifications:

- Lauffer, Henry B.** On CP^1 as an exceptional set. (82m:32012)
Ortner, Norbert Regularisierte Faltung von Distributionen. I. Zur Berechnung von Fundamentallösungen. (English summary) (82e:46058a)

32E10 Stein spaces, Stein manifolds

- Ballico, Edoardo** A remark on a theorem by Fornæss and Narasimhan about the Levi problem. 82g:32019
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Ohsawa, Takeo On complete Kähler domains with C^1 -boundary. 82j:32034

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- Aytuna, A.** (with Terzioğlu, T.) On certain subspaces of a nuclear power series spaces of finite type. (82d:46016)
Brooks, R. M. Analytic structure in the spectra of certain uF-algebras. (82m:46053)
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Fujita, Osamu Sur les systèmes de fonctions holomorphes de plusieurs variables complexes. II. Points critiques des applications. (82c:32008)
Gurjar, R. V. Affine varieties dominated by \mathbb{C}^2 . (82h:14008)
Jennane, B. Groupes de cohomologie d'un fibré holomorphe à base et à fibre de Stein. (82j:32057)
Kajiura, Joji (with Koyanagi, Ryohei) Propriété de Stein et l'existence de solutions globales holomorphes d'un système d'équations différentielles à paramètres complexes. (82k:32032)
Koyanagi, Ryohei See Kajiura, Joji, (82k:32032)
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Takegoshi, Kenshō Weak and strong pseudoconvexities. (82f:32030)
Terzioğlu, T. See Aytuna, A., (82d:46016)
Zaharjuta, V. P. Isomorphism of spaces of analytic functions. (Russian) (82j:46032)

32E15 Runge pairs

secondary classifications:

- Nardelli, Giuliana** (with Tancredi, Alessandro) Holomorphically convex compact subsets of an analytic space. (Italian. English summary) (82c:32014)
Tancredi, Alessandro See Nardelli, Giuliana, (82c:32014)

32E20 Polynomial convexity

- Alexander, H.** Hulls of deformations in \mathbb{C}^n . 82j:32035
Bedford, Eric Stability of the polynomial hull of T^2 . 82j:32036
Weinstock, Barnett M. Uniform approximation on smooth polynomially convex sets. 82d:32009

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- Alexander, H.** On the area of the spectrum of an element of a uniform algebra. (82b:32015)
Bayoumi, Aboubakr Bounding subsets of some metric vector spaces. (82j:46058)
Goldmann, Helmut Nukleare Mengen im \mathbb{C}^n . (82h:46072)
Helemskii, A. Ja. Homological methods in the holomorphic calculus of several operators in Banach space, after Taylor. (Russian) (82e:47020)

32E25 Algebras of holomorphic functions [See also 30H05, 46J10, 46J15.]

- Alexander, H.** On the area of the spectrum of an element of a uniform algebra. 82b:32015
Amar, Éric Interpolation dans le polydisque de \mathbb{C}^n . 82b:32017
Non cohérence de certains anneaux de fonctions holomorphes. 82b:32016
Ballico, Edoardo (with Ferreira, Arturo V.) A structural property of prime ideals in a topological Noetherian algebra with an application to complex analysis. (Italian summary) 82c:32015
Becker, Joseph A. (with Zame, William R.) Homomorphisms into analytic rings. 82k:32042
Chollet, Anne-Marie Carleson sets in \mathbb{C}^n , $n \leq 1$. 82g:32020
Ferreira, Arturo V. See Ballico, Edoardo, 82c:32015
Jakóbczak, Piotr Decomposition property of $A^1(D)$ in strictly pseudoconvex domains. 82a:32017
Jarnicki, Marek Holomorphic functions with bounded growth on Riemann domains over \mathbb{C}^n . (Russian summary) 82c:32023
Kramm, Bruno (\mathcal{Q} FN)-analytic spaces, Stein algebras and a "universal" holomorphic functional calculus. 82c:32024
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Taylor, Richard A generalization of Hartogs' theorem relating to the subalgebras of continuous functions on the n -dimensional torus. 82m:32014
Zame, William R. See Becker, Joseph A., 82k:32042

secondary classifications:

- de Bartolomeis, Paolo** (with Tomassini, Giuseppe) Idéaux de type fini dans $A^\infty(D)$. (English summary) [Ideals of finite type in $A^\infty(D)$] (82k:32004)
Bear, H. S. (with Hile, G. N.) Analytic structure in function algebras. (82c:46064)
Debiard, Amédée (with Gaveau, Bernard) Méthodes de contrôle optimal en analyse complexe. IV. Applications aux algèbres de fonctions analytiques. (82b:32024)
Eguether, G. (with Ferrier, J.-P.) Problèmes de théorie spectrale en une infinité de variables. (82e:46066)
Ferrier, J.-P. See Eguether, G., (82e:46066)
Gaveau, Bernard See Debiard, Amédée, (82b:32024)
Hile, G. N. See Bear, H. S., (82c:46064)
Kosiek, Marek A property of measures orthogonal to a tensor product of function algebras. (Russian summary) (82j:46064a)
Decomposition and spectral properties of operator representations of the algebra $R(K_1 \times K_2)$. (Russian summary) (82j:46064b)

- Lebesgue-type decompositions of a pair of commuting Hilbert space operators. (Russian summary) (82j:46064c)
- Kramm, Bruno Analytische Struktur in Spektren—ein Zugang über die ∞ -dimensionale Holomorphie. (English summary) (82a:46051)
- Nishizawa, Kiyoko A propos de l'unicité du calcul fonctionnel holomorphe des b -algèbres. (82e:46068)
- Pankov, A. A. Expandability of holomorphic Noetherian operator-valued functions. (Russian. Georgian and English summaries) (82e:47026)
- Putinar, Mihai Functional calculus with sections of an analytic space. (82i:32033)
- Simononkov, S. D. Description of the conjugate space to the space of functions that are holomorphic in the domain of a special type. (Russian) (82e:46037)
- Tomassini, Giuseppe See de Bartolomeis, Paolo, (82k:32004)
- Tonev, Toma V. Linear connected sets of matrices with Banach algebra elements. (82m:46059)
- Weinstock, Barnett M. Uniform approximation on smooth polynomially convex sets. (82d:32009)
- Wermer, John Maximum modulus algebras and singularity sets. (82e:46071)
- Wojtaszczyk, P. On projections in spaces of bounded analytic functions with applications. (82a:46059)

32E27 Krasner-Tate algebras, etc. (algebras of holomorphic functions over non-Archimedean fields)

- Bartenwerfer, Wolfgang Die Lösung des nichtarchimedischen Corona-Problems für beliebige Dimension. 82c:32016
- Prolla, João B. On the spectra of non-Archimedean function algebras. 82k:32043

secondary classifications:

- Beckenstein, Edward (with Narici, Lawrence) Extending non-Archimedean norms on algebras. (82m:46077)
- Narici, Lawrence See Beckenstein, Edward, (82m:46077)
- van der Put, Marius La conjecture de la couronne en analyse complexe et p -adique. (82i:32042)
- Sugatani, Takasi Rings of convergent power series and Weierstrass preparation theorem. (82i:32021)

32E30 Holomorphic and polynomial approximation

- Aupetit, Bernard L'approximation entière sur les arcs allant à l'infini dans C^n . 82b:32018
- Beatrous, Frank, Jr. (with Range, R. Michael) On holomorphic approximation in weakly pseudoconvex domains. 82b:32022
- Bedford, Eric (with Fornæss, John Erik) Approximation on pseudoconvex domains. 82b:32019
- Berndtsson, Bo Integral kernels and approximation on totally real submanifolds of C^n . 82c:32017
- Brackx, F. See Delanghe, R., 82e:32025
- Delanghe, R. (with Brackx, F.) Runge's theorem in hypercomplex function theory. 82e:32025
- Dzgnidze, O. P. L^2 -approximation by Hartogs-Laurent and Hartogs-Fourier polynomials. (Russian) 82b:32020
- Ferguson, Le Baron O. Approximation by polynomials with integral coefficients in several complex variables. 82b:32021
- Fornæss, John Erik See Bedford, Eric, 82b:32019
- Harris, Gary A. An algebraic question related to the function theory for real submanifolds of C^n . 82a:32018
- Jakobczak, Piotr Approximation and decomposition theorems for the algebras of analytic functions in strictly pseudoconvex domains. 82k:32044
- Kronstadt, Eric P. (with Neville, Charles W.) Interpolation by vector-valued functions of class H^p and absolutely convergent sequences of interpolating functions. (Italian summary) 82b:32022
- Luttrell, Clement H. On a theorem of Montessus de Ballore for (ν, μ) -type rational approximants in C^n . 82i:32043
- Neville, Charles W. See Kronstadt, Eric P., 82b:32022
- Petrosjan, A. I. Uniform approximation by polynomials on special Weil polyhedra with real nondegenerate skeleton in the space C^2 . (Russian. Armenian summary) 82c:32018
- Range, R. Michael See Beatrous, Frank, Jr., 82b:32022
- Sakai, Akira Uniform approximation on totally real sets. 82e:32026
- Stout, Edgar Lee Uniform approximation on certain unbounded sets in C^n . 82a:32019
- Weinstock, Barnett M. Uniform approximation on the graph of a smooth map in C^n . 82e:32027

secondary classifications:

- Bell, Steven R. Proper holomorphic mappings and the Bergman projection. (82d:32011)
- Chauvat, Jacques (with Chollet, Anne-Marie) Caractérisation et propriétés des ensembles localement pics de $A^n(D)$. (82i:32045)
- Chollet, Anne-Marie See Chauvat, Jacques, (82i:32045)
- Forelli, Frank A necessary condition on the extreme points of a class of holomorphic functions. II. (82k:32021)
- Goldmann, Helmut Nukleare Mengen im C^n . (82b:46072)
- Hortmann, Michael Globale holomorphe Kerne zur Lösung der Cauchy-Riemannschen Differentialgleichungen. (English summary) (82j:32042)
- Zarantonello, Sergio E. The sheaf of outer functions in the polydisc. (82b:32012)

32E35 Global boundary behavior of holomorphic functions

secondary classifications:

- Globevnik, Josip (with Stout, Edgar Lee) Highly noncontinuable functions on convex domains. (French summary) (82c:32013)

- Nagel, Alexander (with Stein, Elias M.; Wainger, Stephen) Boundary behavior of functions holomorphic in domains of finite type. (82k:32027)
- Stein, Elias M. See Nagel, Alexander; et al., (82k:32027)
- Stout, Edgar Lee See Globevnik, Josip, (82c:32013)
- Wainger, Stephen See Nagel, Alexander; et al., (82k:32027)

32E99 None of the above, but in this section

32Fxx Geometric convexity

32F05 Plurisubharmonic functions and generalizations [See also 31C10.]

- de Bartolomeis, Paolo (with Tomassini, Giuseppe) Traces of plurisubharmonic functions. 82b:32023
- Bedford, Eric Envelopes of continuous, plurisubharmonic functions. 82e:32028
- Cegrell, Urban Capacities and extremal plurisubharmonic functions on subsets of C^n . 82e:32029
- Debiard, Amédée (with Gaveau, Bernard) Méthodes de contrôle optimal en analyse complexe. IV. Applications aux algèbres de fonctions analytiques. 82b:32024
- El Mir, Hassine Fonctions plurisousharmoniques et ensembles polaires. 82d:32010
- Gaveau, Bernard See Debiard, Amédée, 82b:32024
- Kalina, Jerzy (with Lawrynów, Julian; Ligočka, Ewa; Skwarczyński, Maciej) On some biholomorphic invariants in the analysis on manifolds. 82b:32025
- Lawrynów, Julian See Kalina, Jerzy; et al., 82b:32025
- Ligočka, Ewa See Kalina, Jerzy; et al., 82b:32025
- Martenko, I. I. Growth and value distributions of some classes of plurisubharmonic functions. (Russian. English summary) 82b:32026
- Okada, Masami Potentiels kähleriens et espaces de Dirichlet. (English summary) 82b:32027
- Prudnikov, V. Ja. Some remarks on a theorem of W. Rudin. (Russian) 82b:32023
- Range, R. Michael A remark on bounded strictly plurisubharmonic exhaustion functions. 82e:32030
- Sadullaev, A. The operator $(dd^c U)^n$ and inner functions in C^n . (Russian) 82b:32028
- Skwarczyński, Maciej See Kalina, Jerzy; et al., 82b:32025
- Tomassini, Giuseppe See de Bartolomeis, Paolo, 82b:32023

secondary classifications:

- Bedford, Eric ($\partial\bar{\partial}$), and the real parts of CR functions. (82a:32024)
- Berenstein, Carlos Alberto (with Taylor, B. A.) Interpolation problems in C^n with applications to harmonic analysis. (82b:32002)
- Cherfaoui, Najib Rayon de bornologie des fonctions plurisousharmoniques sur les espaces de Banach. (English summary) (82c:31006)
- Geller, Daryl The Laplacian and the Kohn Laplacian for the sphere. (82i:35132)
- Taylor, B. A. See Berenstein, Carlos Alberto, (82b:32002)
- Young, N. J. A maximum principle for interpolation in H^∞ . (82i:46083)

32F10 q -convexity, q -concavity

- Ballico, Edoardo Finite morphisms between complex spaces, and q -convexity. (Italian. English summary) 82j:32038
- Principal bundles over q -complete complex spaces. (Italian. English summary) 82j:32037
- Eastwood, Michael G. (with Vigna Suria, Giuseppe) Cohomologically complete and pseudoconvex domains. 82a:32020
- Lieb, Ingo L'opérateur $\bar{\partial}$ sur une variété q -concave. 82i:32044
- Löbke, Martin Beweis einer Vermutung von Hartshorne für den Fall homogener Mannigfaltigkeiten. 82e:32031
- Vigna Suria, Giuseppe See Eastwood, Michael G., 82a:32020

secondary classifications:

- Bariet, Daniel Convexité au voisinage d'un cycle. (82f:14007)
- Buchner, M. (with Fritzsche, K.; Sakai, Takashi) Geometry and cohomology of certain domains in the complex projective space. (82k:32030)
- Ermine, Jean-Louis Cohérence de certaines images directes à supports propres dans le cas d'un morphisme fortement p -convexe. (82k:32031)
- Fritzsche, K. See Buchner, M.; et al., (82k:32030)
- Leistner, Dietmar Cohomologietheorie mit Schranken für pseudokonvexe und pseudokonkave komplexe Räume. (82e:32016)
- Lieb, Ingo (with Range, R. Michael) Lösungsoperatoren für den Cauchy-Riemann-Komplex mit C^k -Abschätzungen. (82d:32012)
- Range, R. Michael See Lieb, Ingo, (82d:32012)
- Sakai, Takashi See Buchner, M.; et al., (82k:32030)
- Silva, Alessandro Some properties of positive line bundles on 1-convex analytic spaces. (82b:32046)

32F15 Pseudoconvex domains

- Akaho, Takao The new estimate for the subbundles E_j and its application to the deformation of the boundaries of strongly pseudoconvex domains. 82g:32021
- Beatrous, Frank, Jr. Hölder estimates for the $\bar{\partial}$ equation with a support condition. 82b:32029
- Bell, Steven R. Biholomorphic mappings and the $\bar{\partial}$ -problem. 82j:32039
- Proper holomorphic mappings and the Bergman projection. 82d:32011
- See also Diederich, Klas; et al., 82j:32040
- Chauvat, Jacques (with Chollet, Anne-Marie) Caractérisation et propriétés des ensembles localement pics de $A^n(D)$. 82i:32045
- Chollet, Anne-Marie See Chauvat, Jacques, 82i:32045
- D'Angelo, John P. Sharp local bounds for orders of contact. (Russian summary) 82m:32015

- Diederich, Klas (with Fornæss, John Erik) A remark on a paper by S. R. Bell: "Biholomorphic mappings and the $\bar{\partial}$ -problem" [Ann. of Math. (2) 114 (1981), no. 1, 103-113]. **82j:32040**
- Fornæss, John Erik See Diederich, Klas, **82j:32040**
- Lieb, Ingo (with Range, R. Michael) Lösungsoperatoren für den Cauchy-Riemann-Komplex mit C^k -Abschätzungen. **82d:32012**
- Makarova, L. Ja. Sufficient conditions for strong linear convexity for polyhedra. (Russian) **82c:32045**
- Range, R. Michael See Lieb, Ingo, **82d:32012**
- Takase, Masahito Sur les domaines intérieurement ramifiés (C)-pseudoconvexes. **82c:32031**

secondary classifications:

- Adachi, Kenzō Continuation of A^n -functions from submanifolds to strictly pseudoconvex domains. **82c:32020**
- Bayoumi, Aboubakar The Levi problem and the radius of convergence of holomorphic functions on metric vector spaces. **82f:46052**
- Bestrou, Frank, Jr. (with Range, R. Michael) On holomorphic approximation in weakly pseudoconvex domains. **82b:32022**
- Bell, Steven R. Smooth bounded strictly and weakly pseudoconvex domains cannot be biholomorphic. **82b:32039**
- Cheng, Shiu Yuen (with Yau, Shing Tung) On the existence of a complete Kähler metric on noncompact complex manifolds and the regularity of Fefferman's equation. **82f:32074**
- Colombeau, Jean-François (with Mujica, Jorge) The Levi problem in nuclear Silva spaces. **82g:46085**
- Crocker, David (with Raeburn, Iain) Toeplitz operators on certain weakly pseudoconvex domains. **82j:47043**
- D'Angelo, John P. Subelliptic estimates and failure of semicontinuity for orders of contact. **82g:32022**
- Diederich, Klas (with Fornæss, John Erik) Comparison of the Bergman and the Kobayashi metric. **82c:32039**
- Fornæss, John Erik See Diederich, Klas, **82c:32039**
- Jakóbczak, Piotr Decomposition property of $A^k(D)$ in strictly pseudoconvex domains. **82a:32017**
- Kori, Tosiaki Cohomologie de de Rham au bord d'un domaine fortement pseudoconvexe. **82m:32010**
- Mujica, Jorge See Colombeau, Jean-François, **82g:46085**
- Ohsawa, Takeo Weakly 1-complete manifold and Levi problem. **82j:32031**
- On $H^{p,q}(X, B)$ of weakly 1-complete manifolds. **82j:32058**
- Raeburn, Iain See Crocker, David, **82j:47043**
- Range, R. Michael See Bestrou, Frank, Jr., **82b:32022**
- Yau, Shing Tung See Cheng, Shiu Yuen, **82f:32074**

32F20 Geometric results on $\bar{\partial}$ -Neumann problems [See also 35N15.]

- Airapetjan, R. A. Analytic representations for CR-functions satisfying a Hölder condition. (Russian) **82c:32032**
- Amar, Éric Extension de formes $\bar{\partial}_b$ fermées et solutions de l'équation $\bar{\partial}_b u = f$. **82a:32021**
- Bell, Steven R. Extendability of proper holomorphic mappings and global analytic hypoellipticity of the $\bar{\partial}$ -Neumann problem. **82c:32046**
- Bogges, Al Kernels for the tangential Cauchy-Riemann equations. **82b:32030**
- Boutet de Monvel, L. Opérateurs de Toeplitz de plusieurs variables complexes. **82c:32033**
- Colombeau, Jean-François (with Perrot, B.) The $\bar{\partial}$ equation in DFN spaces. **82c:32019**
- D'Angelo, John P. Finite type conditions for real hypersurfaces. **82a:32022**
- Subelliptic estimates and failure of semicontinuity for orders of contact. **82g:32022**
- Derrijl, M. (with Fornæss, J. E.) Subelliptic estimate for the $\bar{\partial}$ -Neumann problem. **82c:32047**
- Dufresnoy, Alain Régularité d'une solution du d'' pour un ouvert convexe borné. **82c:32023**
- Favilli, Franco Remarks on the local regularity of the $\bar{\partial}$ -problem. (Italian summary) **82j:32041**
- Fornæss, J. E. See Derrijl, M., **82c:32047**
- Grigis, Alain Propagation des singularités au bord d'ouverts de C^n . **82m:32016**
- Henkin, G. M. Solution des équations de Cauchy-Riemann tangentielle sur des variétés de Cauchy-Riemann q -concaves. (English summary) **82b:32031**
- Hortmann, Michael Globale holomorphe Kerne zur Lösung der Cauchy-Riemannschen Differentialgleichungen. (English summary) **82j:32042**
- Kohn, J. J. Boundary regularity of $\bar{\partial}$. **82j:32043**
- Krantz, Steven G. Finite type conditions and elliptic boundary value problems. **82b:32032**
- Landucci, Mario Solutions with "precise" compact support of the $\bar{\partial}$ -problem in strictly pseudoconvex domains and some consequences. (Italian summary) **82j:32044**
- Mazet, Pierre Un théorème d'hypoellipticité pour l'opérateur $\bar{\partial}$ sur les espaces de Banach. (English summary) **82b:32033**
- Perrot, B. See Colombeau, Jean-François, **82c:32019**
- Sibony, Nessim Un exemple de domaine pseudoconvexe régulier où l'équation $\bar{\partial}u = f$ n'admet pas de solution bornée pour f bornée. **82c:32020**

secondary classifications:

- Barbaev, B. M. (with Nesterenko, V. V.) Relativistic string model in a space-time of a constant curvature. **82c:83045**
- Bogges, Al Kernels for the local solvability of the tangential Cauchy-Riemann equations. **82j:32045**
- Catlin, David Necessary conditions for subellipticity and hypoellipticity for the $\bar{\partial}$ -Neumann problem on pseudoconvex domains. **82j:35038**
- Charpentier, Philippe Formules explicites pour les solutions minimales de l'équation $\bar{\partial}u = f$ dans la boule et dans le polydisque de C^n . **82j:32009**
- D'Angelo, John P. Sharp local bounds for orders of contact. (Russian summary) **82m:32015**

- Greiner, Peter C. Spherical harmonics on the Heisenberg group. **82c:43009**
- Grigis, Alain Propagation des singularités au bord d'ouverts de C^n . **82j:35106**
- Hatrup, Dieter ★Der $\bar{\partial}$ -Operator auf Produkten streng pseudokonvexer Gebiete. (German) [The $\bar{\partial}$ -operator on products of strictly pseudoconvex domains] **82b:32005**
- Hunt, L. R. (with Murray, John; Strauss, M. J.) Liouville's theorem for first-order partial differential operators. **82f:35028**
- Kim, Jongsik (with Kim, Jung Soo; Ship, Joon Kook) Unsolvability of the Mizohata operator. **82c:35003**
- Kim, Jung Soo See Kim, Jongsik; et al., **82c:35003**
- Landucci, Mario Solutions with precise compact support of $\bar{\partial}u = f$. (French summary) **82j:35139**
- Leville, Guy Changement de jauge de deuxième espèce pour l'électron de Landau et équations de Cauchy-Riemann tangentielles. (English summary) **82c:78012**
- Murray, John See Hunt, L. R.; et al., **82f:35028**
- Nesterenko, V. V. See Barbaev, B. M., **82c:83045**
- Popivanov, Pet'ar R. Some classes of differential operators having no solutions. (Russian) **82j:35006**
- Rothschild, Linda Preiss Nonexistence of optimal L^2 estimates for the boundary Laplacian operator on certain weakly pseudoconvex domains. **82f:35060**
- Shin, Joon Kook See Kim, Jongsik; et al., **82c:35003**
- Skoda, Henri Remarques à propos des théorèmes d'annulation pour les fibrés semi-positifs. **82c:32057**
- Strauss, M. J. See Hunt, L. R.; et al., **82f:35028**
- Vasilescu, F.-H. Special perturbations of the $\bar{\partial}$ -operators. **82c:47023**

32F25 Real submanifolds in complex manifolds

- de Bartolomeis, Paolo See Bedford, Eric, **82a:32025**
- Bedford, Eric ($\bar{\partial}\bar{\partial}$), and the real parts of CR functions. **82a:32024**
- (with de Bartolomeis, Paolo) Levi flat hypersurfaces which are not holomorphically flat. **82a:32025**
- Bogges, Al Kernels for the local solvability of the tangential Cauchy-Riemann equations. **82j:32045**
- Diederich, Klas (with Webster, S. M.) A reflection principle for degenerate real hypersurfaces. **82j:32046**
- Primicerio, Angela Selvaggi (with Taiani, Geraldine) Families of analytic discs with boundary on a nongeneric CR submanifold. (Italian. English summary) **82j:32047**
- Taiani, Geraldine See Primicerio, Angela Selvaggi, **82j:32047**
- Webster, S. M. See Diederich, Klas, **82j:32046**

secondary classifications:

- Besnault, Jacques (with Dolbeault, Pierre) Sur les bords d'ensembles analytiques complexes dans $P^n(C)$. **82j:32020**
- Burns, Dan, Jr. (with Shnider, Steven) Projective connections in CR geometry. **82b:53030**
- D'Angelo, John P. Finite type conditions for real hypersurfaces. **82a:32022**
- Dolbeault, Pierre See Besnault, Jacques, **82j:32020**
- Farn, James J., V. Lewy's curves and chains on real hypersurfaces. **82b:32016**
- Harris, Gary A. An algebraic question related to the function theory for real submanifolds of C^n . **82a:32018**
- Landucci, Mario Boundary values of holomorphic functions and Cauchy problem for $\bar{\partial}$ operator in the polydisc. **82d:32005**
- Lojasiewicz, Stanisław (with Siciak, Józef) On holomorphic extendibility of functions on generic real analytic submanifolds. (Russian summary) **82a:32016**
- Matsuda, Hiro-o Notes on pseudoconvex manifolds. **82b:53045**
- Shnider, Steven See Burns, Dan, Jr., **82b:53030**
- Siciak, Józef See Lojasiewicz, Stanisław, **82a:32016**
- Švec, Alois On 3-dimensional CR-manifolds. (Czech and Russian summaries) **82c:53029**
- Wong, Bun Erratum: "Curvature and pseudoconvexity on complex manifolds" [Adv. in Math. 37 (1980), no. 2, 99-104; MR 82b:53086]. **82m:53070**
- Yau, Stephen S. T. Kohn-Rossi cohomology and its application to the complex Plateau problem. I. **82c:32038**

32F30 Pseudoconvex manifolds

secondary classifications:

- Jacobowitz, Howard Mappings between CR manifolds. **82j:32023**
- Laufer, Henry B. Versal deformations for two-dimensional pseudoconvex manifolds. **82g:32024**
- On C^p as an exceptional set. **82m:32012**
- Vo Van Tan On the compactification of strongly pseudoconvex surfaces. **82i:32054**

32F99 None of the above, but in this section

- Makarova, L. Ja. Sufficient conditions for linear convexity and some properties of linearly convex domains with a smooth boundary. (Russian) **82c:32021**
- Schapiro, Pierre Conditions de positivité dans une variété symplectique complexe. Applications à l'étude des microfonctions. (English summary) **82b:32034**
- Vasilescu, F.-H. The stability of the Euler characteristic for Hilbert complexes. **82c:32022**
- secondary classifications:
- Gindikin, S. G. Twistor representation of a non-self-dual metric. (Russian) **82c:83020**
- Jewell, Nicholas P. Toeplitz operators on the Bergman spaces and in several complex variables. **82c:47028**
- Ligocka, Ewa On proper holomorphic and biholomorphic mappings between product domains. (Russian summary) **82c:32051**
- Wells, R. O., Jr. Cohomology and the Penrose transform. **82b:81048**

32Gxx Deformations of analytic structures

Gunning, R. C. ★ On uniformization of complex manifolds: the role of connections. (82c:32034)

32G05 Deformations of complex structures [See also 13D10, 16A58, 58H10, 58H15.]

Akahori, Takao On the existence of a versal family of deformations of solutions of a differential equation. (82f:32032)

Campana, Frédéric Algèbre et compacité dans l'espace des cycles d'un espace analytique complexe. (82a:32026)

Hamilton, Richard S. Deformation of complex structures on manifolds with boundary. II. Families of noncoercive boundary value problems. (82e:32035)

Hatvany, Csaba Trivial regions of infinitesimal deformations. (82k:32048)

Laufer, Henry B. Lifting cycles to deformations of two-dimensional pseudoconvex manifolds. (82j:32048)

Namba, Makoto ★ Families of meromorphic functions on compact Riemann surfaces. (82i:32046)

Ponomarev, D. A. Deformations of complex tori. (Russian) (82k:32049)

Retah, V. S. Massey operations, obstructions to formality in Sullivan's sense and obstructions to Kodaira-Spencer deformations. (Russian) (82e:32036)

Siu, Yum Tong (with Trautmann, Günther) Deformations of coherent analytic sheaves with compact supports. (82c:32023)

Suwa, Tatsuo Deformations of complex analytic Seifert fibre spaces. (Japanese) (82m:32017)

Trautmann, Günther See Siu, Yum Tong. (82c:32023)

secondary classifications:

Akahori, Takao The new estimate for the subbundles E_j and its application to the deformation of the boundaries of strongly pseudoconvex domains. (82g:32021)

Bănică, Constantin (with Putinar, Mihai; Schumacher, Georg) Variation der globalen Ext in Deformationen kompakter komplexer Räume. (82e:32015)

Duchamp, T. (with Kalka, M.) Deformation theory for holomorphic foliations. (82b:57019)

Kalka, M. See Duchamp, T., (82b:57019)

Kemml, George R. Deformations of symmetric products. (82k:14023)

Machara, Kazuhisa On elliptic surfaces whose first Betti numbers are odd. (82a:32036)

Ofman, Salomon Transformée de Radon et intégrale sur les cycles analytiques compacts de certains ouverts de l'espace projectif complexe. (English summary) (82c:32009)

Putinar, Mihai See Bănică, Constantin; et al., (82e:32015)

Schumacher, Georg See Bănică, Constantin; et al., (82e:32015)

Sundaraman, D. ★ Moduli, deformations and classifications of compact complex manifolds. (82e:32001)

Suwa, Tatsuo Deformations of holomorphic Seifert fiber spaces. (82m:32024)

32G07 Deformations of special (e.g. CR) structures

secondary classifications:

Ancona, Vincenzo (with Tomassini, Giuseppe) Géométrie des modifications formelles. (Italian summary) (82d:32007)

Gómez-Mont, Xavier Transversal holomorphic structures. (82j:53065)

Tomassini, Giuseppe See Ancona, Vincenzo, (82d:32007)

32G10 Deformations of submanifolds and subspaces

Axelsson, Reynir (with Schumacher, Georg) Eine Künneth-Formel für die Tangentialkohomologie kompakter komplexer Räume. (82g:32023)

Barlet, Daniel Familles analytiques de cycles et classes fondamentales relatives. (82d:32013)

Dwilewicz, Roman Fibration of a neighbourhood of a complex compact submanifold. (Russian summary) (82m:32018)

Hénaut, Alain Cycles et cône tangent de Zariski. (82a:32027)

Schumacher, Georg See Axelsson, Reynir, (82g:32023)

secondary classifications:

Barlet, Daniel Convexité au voisinage d'un cycle. (82f:14007)

van Haeringen, H. See Kok, L. P., (82g:81092)

Kok, L. P. (with van Haeringen, H.) On the theory of complex potential scattering. (82g:81092)

Laufer, Henry B. Lifting cycles to deformations of two-dimensional pseudoconvex manifolds. (82j:32048)

Šarin, V. I. Analytic continuation with respect to a parameter and multiplication of generalized functions. (Russian) (82m:46043)

Tsuji, Hajime On the neighbourhood of a Hopf surface. (82m:32023)

32G11 Deformations of singularities

secondary classifications:

Čmutov, S. V. Monodromy groups of singularities of functions of two variables. (Russian) (82i:32022)

Damon, James Finite determinacy and topological triviality. I. (82f:58018)

Laufer, Henry B. On CP^1 as an exceptional set. (82m:32012)

Wahl, Jonathan M. Elliptic deformations of minimally elliptic singularities. (82d:14004)

32G13 Analytic moduli problems (For algebraic moduli problems, see 14D20.)

Cattani, Eduardo H. (with Kaplan, Aroldo G.) On the local monodromy of a variation of Hodge structure. (82j:32049)

Fujiki, Akira Countability of the Douady space of a complex space. (82e:32037)

Fujita, Takao On Kähler fiber spaces over curves. (82h:32024)

Kaplan, Aroldo G. See Cattani, Eduardo H., (82j:32049)

Laufer, Henry B. Versal deformations for two-dimensional pseudoconvex manifolds. (82g:32024)

Tsuboi, Syoji On the sheaves of holomorphic vector fields on surfaces with ordinary singularities in a projective space. III. (82g:32025)

secondary classifications:

Becker, Joseph A. (with Lipshitz, Leonard) Remarks on the elementary theories of formal and convergent power series. (82i:14004a)

(with Lipshitz, Leonard) Errata to the paper: "Remarks on the elementary theories of formal and convergent power series". (82i:14004b)

Campana, Frédéric Images directes de cycles compacts par un morphisme et application à l'espace des cycles des tores. (82i:32056)

Carlson, James A. Extensions of mixed Hodge structures. (82g:14013)

(with Griffiths, Phillip A.) Infinitesimal variations of Hodge structure and the global Torelli problem. (82h:14006)

Gerritzen, Lothar Zur analytischen Beschreibung des Raumes der

Schottky-Mumford-Kurven. (82m:14014)

Griffiths, Phillip A. See Carlson, James A., (82i:14006)

Lai, K. F. (with Wong, Bun) Two moduli problems and some of their connections with differential geometry. (82h:14006)

Lipshitz, Leonard See Becker, Joseph A., (82i:14004)

Penkov, I. B. The Penrose transform on general Grassmannians. (82j:14013)

Sundaraman, D. ★ Moduli, deformations and classifications of compact complex manifolds. (82e:32001)

Suwa, Tatsuo Deformations of holomorphic group actions. (82m:32028)

Terao, Hiroaki Forms with logarithmic pole and the filtration by the order of the pole. (82h:14004)

Wong, Bun See Lai, K. F., (82h:14006)

32G15 Moduli of Riemann surfaces, Teichmüller theory [See also 14H15, 30Fxx.]

Abikoff, William ★ The real analytic theory of Teichmüller space. (82a:32028)

Bers, Lipman Finite-dimensional Teichmüller spaces and generalizations. (82k:32050)

Douady, Adrien L'espace de Teichmüller. (See 82m:57003)

Earle, Clifford J. Some intrinsic coordinates on Teichmüller space. (82j:32050)

Fathi, Albert (with Laudenbach, F.) Comment Thurston compactifie l'espace de Teichmüller. (See 82m:57003)

Gardiner, Frederick P. On Jenkins-Strebel differentials for open Riemann surfaces. (82b:32035)

Gilman, Jane A remark about components of relative Teichmüller spaces. (82f:32033)

Keen, Linda On hyperelliptic Schottky groups. (82a:32029)

Kra, Irwin On the Nielsen-Thurston-Bers type of some self-maps of Riemann surfaces. (82m:32019)

Canonical mappings between Teichmüller spaces. (82h:32036)

Krukal', S. L. Invariant metrics in Teichmüller spaces. (Russian) (82k:32051)

Laudenbach, F. See Fathi, Albert, (See 82m:57003)

Laufer, Henry B. On generalized Weierstrass points and rings with no prime elements. (82m:32020)

Lax, Robert F. Gap sequences and moduli in genus 4. (82a:32030)

Multiples of Weierstrass points as special divisors. (82d:32014)

Masur, Howard Uniquely ergodic quadratic differentials. (82a:32031)

Taniguchi, Masahiko Remarks on topologies associated with squeezing a nondividing loop on compact Riemann surfaces. II. (82k:32052)

Wolpert, Scott An elementary formula for the Fenchel-Nielsen twist. (82h:32053)

secondary classifications:

Apanasov, B. N. Kleinian groups, Teichmüller space and Mostow's rigidity theorem. (Russian) (82g:22011)

Clemens, Charles Herbert ★ A scrapbook of complex curve theory. (82i:14001)

Čučev, V. V. Schottky spaces of type (g, s, m) . (Russian) (82e:30066)

Fathi, Albert (with Laudenbach, F.) Les feuilletages mesurés. (See 82m:57003)

Les feuilletages mesurés (suite). (See 82m:57003)

See also Poénaru, V., (See 82m:57003)

Gardiner, Frederick P. On a notion of quasiconformal rigidity for Riemann surfaces. (82m:30048)

Gehring, F. W. Spirals and the universal Teichmüller space. (82g:30075)

Harvey, W. J. Geometric structure of surface mapping class groups. (82e:57012)

Heins, Maurice Weierstrassian global complex analysis from the Riemannian point of view. (82j:30069)

Hubbard, John H. The monodromy of projective structures. (82k:14009)

(Kra, Irwin) See Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. (82f:32002)

Krukal', S. L. To the problem of the supports of Beltrami differentials for Kleinian groups. (82b:30057)

Invariant metrics and quasiconformal mappings. (Russian) (82j:30025)

Kurihbayashi, Akikazu A generalization of λ function. (82e:30062)

Kusunoki, Yukio (with Taniguchi, Masahiko) A continuity property of holomorphic differentials under quasiconformal deformations. (82g:30076)

Laudenbach, F. La théorie de Thurston sur les surfaces à bord. (See 82m:57003)

See also Fathi, Albert, (See 82m:57003)

(Maskit, Bernard) See Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. (82f:32002)

Masser, Howard Transitivity properties of the horocyclic and geodesic flows on moduli space. (82k:30047)

Nicholls, Peter J. Garnett points for Fuchsian groups. (82h:30056)

Poinaru, V. Rappels de géométrie hyperbolique en dimension 2 et généralités sur $\mathbb{R} \times S \rightarrow \mathbb{R}_+$. (See 82m:57003)

L'espace des courbes simples fermées sur une surface. (See 82m:57003)

See also Fathi, Albert; et al., (See 82m:57003)

Taniguchi, Masahiko See Kusanoki, Yukio, (82g:30076)

(Thurston, William) See Travaux de Thurston sur les surfaces, (82m:57003)

Wason, Judith C. On infinite Nielsen kernels. (82i:30063)

Astérisque ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] (82m:57003)

Conference:

Riemann Surfaces and Related Topics ★Riemann surfaces and related topics:

Proceedings of the 1978 Stony Brook Conference. (82f:32002)

Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference

★Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook

Conference. (82f:32002)

Stony Brook, N.Y. ★Riemann surfaces and related topics: Proceedings of the 1978 Stony Brook Conference. (82f:32002)

Travaux de Thurston sur les surfaces ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] (82m:57003)

The works of Thurston on surfaces ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] (82m:57003)

32G20 Period matrices [See also 14H05.]

Shiga, Hironori One attempt to the $K3$ modular function. II. 82k:32054

secondary classifications:

Gunning, R. C. On the period classes of Prym differentials. I. (82f:14037)

Hwang Ma, Shu Yin Periods of iterated integrals of holomorphic forms on a compact Riemann surface. (82k:14025)

Shiba, Masakazu Analytic mappings of a Riemann surface of finite type into a torus. (82f:14025)

Tretkoff, Marvin D. The Fermat surface and its periods. (82j:14033)

Varčenko, A. N. Asymptotic Hodge structure on vanishing cohomology. (Russian) (82m:32007)

32G99 None of the above, but in this section

Bingener, Jürgen Darstellbarkeitskriterien für analytische Funktoren. 82k:32047
Offenheit der Versalität in der analytischen Geometrie. 82h:32025

secondary classifications:

(Bell, Steven R.) See Diederich, Klas; et al., (82j:32040)

Diederich, Klas (with Fornæss, John Erik) A remark on a paper by S. R. Bell: "Biholomorphic mappings and the $\bar{\partial}$ -problem" [Ann. of Math. (2) 114 (1981), no. 1, 103-113]. (82j:32040)

Fornæss, John Erik See Diederich, Klas, (82j:32040)

Griffiths, Phillip A. ★An introduction to the theory of special divisors on algebraic curves. (82j:14025)
(with Morgan, John W.) ★Rational homotopy theory and differential forms. (82m:55014)

Morgan, John W. See Griffiths, Phillip A., (82m:55014)

Ueno, Kimio Monodromy preserving deformation of linear differential equations with irregular singular points. (82f:34012)

Monodromy preserving deformation and its application to soliton theory. (82f:34013)

32Hxx Holomorphic mappings

32H05 Representative domains

Eastwood, Michael G. (with Ginsberg, Matthew L.) Duality in twistor theory. 82k:32055
Ginsberg, Matthew L. See Eastwood, Michael G., 82k:32055

Skwarczyński, Maciej Biholomorphic invariants related to the Bergman function. 82e:32038

The ideal boundary of a domain in \mathbb{C}^n . 82j:32051

32H10 Bergman kernel function

Aronov, A. M. The Bergman kernel with respect to a measure. (Russian) 82i:32048

Ligocka, Ewa Some remarks on extension of biholomorphic mappings. 82h:32037

How to prove Fefferman's theorem without use of differential geometry. 82j:32052

Lu, Qi Keng The estimation of the intrinsic derivatives of the analytic mappings of bounded domains. 82d:32015

Zinov'ev, B. S. The Bergman kernel with weight in multicircular domains. (Russian) 82k:32056

secondary classifications:

Knapp, A. W. (with Wallach, Nolan R.) Correction and addition: "Szegő kernels associated with discrete series" [Invent. Math. 34 (1976), no. 3, 163-200; MR 54 #7704]. (82k:22016)

Skwarczyński, Maciej A remark on holomorphic isometries with respect to the induced Bergman metrics. (82k:32016)

Biholomorphic invariants related to the Bergman function. (82e:32038)

The ideal boundary of a domain in \mathbb{C}^n . (82j:32051)

Wallach, Nolan R. See Knapp, A. W., (82i:22016)

32H15 Invariant metrics and pseudodistances

Burbea, Jacob A generalization of Pick's theorem and its applications to intrinsic metrics. 82g:32026

Diederich, Klas (with Fornæss, John Erik) Comparison of the Bergman and the Kobayashi metric. 82e:32039

Fornæss, John Erik (with Sibony, Nessim) Increasing sequences of complex manifolds. 82g:32027

See also Diederich, Klas, 82e:32039

Franzoni, Tullio (with Vesentini, Edoardo) ★Holomorphic maps and invariant distances. 82k:32032

Hahn, Kyong T. Some remarks on a new pseudodifferential metric. 82f:32034

Helton, J. William The distance of a function to H^∞ in the Poincaré metric; electrical power transfer. 82f:32035

Kim, Sang Moon Harmonic pseudometric and the product property of pseudometric. 82f:32036

Moreau, Jean-Charles Un aspect algébrique des lemmes de Schwarz en plusieurs variables. (English summary) 82f:32037

Sato, Shiwach Pseudodistance defined by a set of holomorphic functions and n -convex domains. 82f:32038

Sibony, Nessim See Fornæss, John Erik, 82g:32027

Skwarczyński, Maciej A remark on holomorphic isometries with respect to the induced Bergman metrics. 82d:32016

Stanton, Charles M. A characterization of the polydisc. 82g:32028

Suzuki, Masaaki The holomorphic curvature of intrinsic metrics. 82k:32057

Vesentini, Edoardo See Franzoni, Tullio, 82k:32032

secondary classifications:

Hristov, V. Z. On the topology induced by the Carathéodory metric. (82k:54002)

Kobayashi, Shoshichi Projective structures of hyperbolic type. (82h:53028)

(with Sasaki, Takeshi) Projective structures with trivial intrinsic pseudodistance. (82h:53029)

Kraśkal, S. L. Invariant metrics and quasiconformal mappings. (Russian) (82j:30025)

Invariant metrics in Teichmüller spaces. (Russian) (82k:32051)

Lu, Qi Keng The estimation of the intrinsic derivatives of the analytic mappings of bounded domains. (82d:32015)

Ohsawa, Takeo A remark on the completeness of the Bergman metric. (82j:32053)

Sasaki, Takeshi See Kobayashi, Shoshichi, (82h:53029)

Skwarczyński, Maciej The ideal boundary of a domain in \mathbb{C}^n . (82j:32051)

Wolpert, Scott A generalization of the Ahlfors-Schwarz lemma. (82m:53013)

32H20 Hyperbolic complex manifolds

Babec, V. A. A theorem on hyperbolicity. (Russian) 82g:32029

Degjar, P. V. Asymptotic behavior of the characteristic function of a holomorphic mapping. (Russian) 82g:32030

Goebel, Kazimierz (with Sekowski, T.; Stachura, A.) Uniform convexity of the hyperbolic metric and fixed points of holomorphic mappings in the Hilbert ball. 82f:32039

Kanemaru, Tadayoshi A remark on hyperbolic manifolds. 82g:32031

Kim, Kang Tae Schottky-Landau property and hyperbolicity of complex manifolds. 82k:32058

Kodama, Akio On bimeromorphic automorphisms of hyperbolic complex spaces. 82k:32059

Ohsawa, Takeo A remark on the completeness of the Bergman metric. 82j:32053

Royden, H. L. The Ahlfors-Schwarz lemma in several complex variables. 82i:32049

Sekowski, T. See Goebel, Kazimierz; et al., 82f:32039

Stachura, A. See Goebel, Kazimierz; et al., 82f:32039

Zaidenberg, M. G. On the theorems of Brody and Green on conditions for complete hyperbolicity of complex manifolds. (Russian) 82d:32017

secondary classifications:

Babec, V. A. Nevanlinna defect relation for holomorphic maps into closed sets. (Russian. Armenian summary) (82k:32062)

Fornæss, John Erik (with Sibony, Nessim) Increasing sequences of complex manifolds. (82g:32027)

Kalina, Jerzy (with Lawrynów, Julian; Ligocka, Ewa; Skwarczyński, Maciej) On some biholomorphic invariants in the analysis on manifolds. (82h:32025)

Lawrynów, Julian See Kalina, Jerzy; et al., (82h:32025)

Ligocka, Ewa See Kalina, Jerzy; et al., (82h:32025)

Rabotin, V. V. Finiteness of the number of holomorphic mappings into some algebraic varieties. (Russian) (82k:32061)

Sibony, Nessim See Fornæss, John Erik, (82g:32027)

Skwarczyński, Maciej See Kalina, Jerzy; et al., (82h:32025)

Stanton, Charles M. A characterization of the polydisc. (82g:32028)

Wu, Hung Hsi Some theorems on projective hyperbolicity. (82j:53061)

32H25 Picard type theorems and generalizations {For function-theoretic properties, see 32A22.}

Bandman, T. M. Holomorphic functions omitting two values on an affine surface. (Russian. English summary) 82g:32032

Degjar, P. V. Some questions of the value distribution theory of holomorphic mappings and complex variations. (Russian) 82j:32054

- Druzkowski, Ludwik M. (with Winiarski, Tadeusz) Composition of polynomial with entire mapping. (Russian summary) **82k:32060**
- Green, Mark (with Griffiths, Phillip A.) Two applications of algebraic geometry to entire holomorphic mappings. **82h:32026**
- Griffiths, Phillip A. See Green, Mark, **82h:32026**
- Kizuka, Takashi Analytic automorphisms of the complement of an algebraic curve in the complex projective plane. **82i:32050**
- Nishino, Toshio (with Suzuki, Masakazu) Sur les singularités essentielles et isolées des applications holomorphes à valeurs dans une surface complexe. **82c:32024**
- Noëka, E. I. Uniqueness theorems for rational functions on algebraic varieties. (Russian) **82f:32040**
- Petridis, Nicholas C. Distance and volume decreasing theorems for quasiconformal mappings. **82j:32055**
- Rabotin, V. V. Finiteness of the number of holomorphic mappings into some algebraic varieties. (Russian) **82k:32061**
- Suzuki, Masakazu See Nishino, Toshio, **82c:32024**
- Winiarski, Tadeusz See Druzkowski, Ludwik M., **82k:32060**
- Wong, Pit Mann Holomorphic mappings into abelian varieties. **82d:32018**

secondary classifications:

- Degtiar, P. V. A theorem of Sohočik type and the Bezout inequality for certain classes of holomorphic mappings. (Russian) **82k:32063**
- Har'El, Zvi Projective mappings and distortion theorems. **82g:53045**
- Kendall, W. S. Brownian motion, negative curvature, and harmonic maps. **82k:58099**
- Petridis, Nicholas C. Generalizations of Picard's first theorem. **82g:53047**

32H30 Value distribution theory in higher dimensions {For function-theoretic properties, see 32A22.}

- Babec, V. A. Nevanlinna defect relation for holomorphic maps into closed sets. (Russian. Armenian summary) **82k:32062**
- Degtiar, P. V. Asymptotic behavior of the order functions of holomorphic mappings. (Russian) **82h:32038**
- A theorem of Sohočik type and the Bezout inequality for certain classes of holomorphic mappings. (Russian) **82k:32063**
- Drouilhet, S. J. A unicity theorem for meromorphic mappings between algebraic varieties. **82m:32021**
- Griffiths, Phillip A. (with King, James R.) ★Теория Неванлинны и голоморфные отображения алгебраических многообразий. (Russian) [Nevanlinna theory and holomorphic mappings between algebraic varieties] **82d:32019**
- King, James R. See Griffiths, Phillip A., **82d:32019**
- Okada, Masami Une estimation modifiée du type de Bezout pour les applications holomorphes équidimensionnelles entières de \mathbb{C}^n . (English summary) **82c:32025**

secondary classifications:

- Bandman, T. M. Holomorphic functions omitting two values on an affine surface. (Russian. English summary) **82g:32032**
- Nishino, Toshio Value distribution of analytic functions of two variables. (Japanese) **82j:32001**
- Petrenko, V. P. (with Šimsa, Ja.) A class of entire curves. (Russian. Armenian summary) **82c:32003**
- Sibony, Nessim (with Wong, Pit Mann) Some remarks on the Casorati-Weierstrass theorem. **82k:32015**
- Šimsa, Ja. See Petrenko, V. P., **82c:32003**
- Sung, Chen Han Defect relations of holomorphic curves and their associated curves in $\mathbb{C}P^n$. **82a:30039**
- Wong, Pit Mann See Sibony, Nessim, **82k:32015**

32H99 None of the above, but in this section

- Bell, Steven R. Smooth bounded strictly and weakly pseudoconvex domains cannot be biholomorphic. **82b:32039**
- Bondar, A. V. Mappings possessing a constant rotation operator along cones. (Russian. English summary) **82c:32026**
- Continuous operator-conformal mappings. (Russian) **82c:32027**
- Brodskii, A. A. Some properties of solutions of the Löwner-Kufarev equation in the space \mathbb{C}^n . (Russian) **82c:32028**
- Lawrynowicz, Julian On biholomorphic continuability of regular quasiconformal mappings. **82a:32033**
- Lempert, L. A note on mapping polydiscs into balls and vice versa. **82b:32040**
- Ligocka, Ewa On proper holomorphic and biholomorphic mappings between product domains. (Russian summary) **82i:32051**
- Łojasiewicz, Stanisław Remarque sur les biholomorphismes polynomiales. (English and Russian summaries) **82d:32020a**
- Nishimura, Yasuhiro Examples of analytic immersions of two-dimensional Stein manifolds into \mathbb{C}^2 . **82i:32052**
- Szparglas, A. Platitude des revêtements ramifiés. **82f:32041**
- Takeuchi, Akira Nonimmersibility of $\mathbb{P}^n \setminus S$ into \mathbb{C}^n . **82b:32041**
- Watanabe, Chikara A remark on the constant Jacobian problem. **82k:32064**
- Winiarski, Tadeusz Inverse of polynomial automorphisms of \mathbb{C}^n . (Russian summary) **82d:32020b**
- Wood, John C. An extension theorem for holomorphic mappings. **82d:32021**
- Zhang, Jin Hao Coefficient problems of holomorphic mappings on Reinhardt domains. **82b:32042**

secondary classifications:

- Alexander, H. Projective capacity. **82k:32014**
- Bandman, T. M. Surjective holomorphic mappings of projective manifolds. (Russian) **82j:32007**

- Bedford, Eric Holomorphic mapping of products of annuli in \mathbb{C}^n . **82c:32001**
- Bell, Steven R. Biholomorphic mappings and the δ -problem. **82j:32039**
- Extendability of proper holomorphic mappings and global analytic hypoellipticity of the $\bar{\partial}$ -Neumann problem. **82k:32046**
- Diederich, Klas (with Webster, S. M.) A reflection principle for degenerate real hypersurfaces. **82j:32046**
- Freitag, Eberhard Eine Bemerkung zur Theorie der Hilbertschen Modulmannigfaltigkeiten hoher Stufe. **82c:10033**
- Heath, L. F. (with Suffridge, T. J.) Holomorphic retracts in complex n -space. **82c:32003**
- Kodama, Akio On the equivalence problem for a certain class of generalized Siegel domains. I. **82c:32033a**
- On the equivalence problem for a certain class of generalized Siegel domains. II. **82c:32033b**
- Ligocka, Ewa Some remarks on extension of biholomorphic mappings. **82b:32037**
- Rudin, Walter Holomorphic maps that extend to automorphisms of a ball. **82c:32012**
- Totally real Klein bottles in \mathbb{C}^2 . **82i:32012**
- Shih, Mou Hsiang Rouché's and related theorems for analytic functions of several complex variables. **82k:32019**
- Suffridge, T. J. See Heath, L. F., **82c:32003**
- Tataru-Mihal, P. On the instanton solutions for the SU_2 gauge field theory. (Italian and Russian summaries) **82c:81034**
- Webster, S. M. See Diederich, Klas, **82j:32046**

32Jxx Compact analytic spaces {For Riemann surfaces, see 14Hxx, 30Fxx.}

32J05 Compactification

- Carlson, James A. (with Cattani, Eduardo H.; Kaplan, Aroldo G.) Mixed Hodge structures and compactifications of Siegel's space (preliminary report). **82i:32053**
- Cattani, Eduardo H. See Carlson, James A.; et al., **82i:32053**
- Kaplan, Aroldo G. See Carlson, James A.; et al., **82i:32053**
- Namikawa, Yukihiro ★Toroidal compactification of Siegel spaces. **82a:32034**
- Vo Van Tan On the compactification of strongly pseudoconvex surfaces. **82i:32054**

secondary classifications:

- Fathi, Albert (with Laudenbach, F.) Comment Thurston compactifie l'espace de Teichmüller. (See **82m:57003**)
- Laudenbach, F. See Fathi, Albert, (See **82m:57003**)

32J10 Algebraic dependence theorems

- Frankel, Robert Erratum: "A differential geometric criterion for Moishezon spaces" [Math. Ann. **241** (1979), no. 2, 107-112; MR **80i:32057**]. **82d:32023**

32J15 Compact surfaces

- Dioussy, Georges Sur les surfaces compactes de la classe VII_0 contenant une coquille sphérique globale. (English summary) **82f:32042**
- Enoki, Ichiro On surfaces of class VII_0 with curves. **82d:32022**
- Inoue, Masahisa (with Kobayashi, Shoshichi; Ochiai, Takushiro) Holomorphic affine connections on compact complex surfaces. **82g:32033**
- Kaup, Ludger On the topology of compact complex surfaces. **82c:32040**
- Kobayashi, Shoshichi On holomorphic connections. **82m:32022**
- See also Inoue, Masahisa; et al., **82g:32033**
- Looijenga, Eduard (with Peters, Chris) Torelli theorems for Kähler $K3$ surfaces. **82a:32035**
- Maehara, Kazuhisa On elliptic surfaces whose first Betti numbers are odd. **82a:32036**
- Ochiai, Takushiro See Inoue, Masahisa; et al., **82g:32033**
- Peters, Chris On automorphisms of compact Kähler surfaces. **82c:32029**
- See also Looijenga, Eduard, **82a:32035**
- Todorov, A. N. Applications of the Kähler-Einstein-Calabi-Yau metric to moduli of $K3$ surfaces. **82k:32065**
- Tsuji, Hajime On the neighbourhood of a Hopf surface. **82m:32023**
- Usui, Sampei Period map of surfaces with $p_g = c_1^2 = 1$ and K ample. **82e:14040**

secondary classifications:

- Green, Mark (with Griffiths, Phillip A.) Two applications of algebraic geometry to entire holomorphic mappings. **82h:32026**
- Griffiths, Phillip A. See Green, Mark, **82h:32026**
- Matsumaga, Hiromichi Smooth circle group actions on complex surfaces. **82h:14023**
- Reid, Miles Bogomolov's theorem $c_1^2 \leq 4c_2$. **82h:14014**
- Sommese, Andrew John Hyperplane sections of projective surfaces. I. The adjunction mapping. **82f:14033**
- Stiller, Peter F. Elliptic curves over function fields and the Picard number. **82f:14035**
- Wong, Bum Curvature and pseudoconvexity on complex manifolds. **82b:53086**

32J20 Algebraicity criteria

- Rusek, Kamil (with Winiarski, Tadeusz) Criteria for regularity of holomorphic mappings. (Russian summary) **82i:32055**
- Winiarski, Tadeusz See Rusek, Kamil, **82i:32055**

secondary classifications:

- Campana, Frédéric Algèbre et compacité dans l'espace des cycles d'un espace analytique complexe. **82a:32026**

- Herst, Camilla Über Bilder projektiv-algebraischer Räume. (82c:32020)
 Yoshikura, Hisao Structure of complex tori with the automorphisms of maximal degree. (82c:14045)

32J25 Transcendental methods of algebraic geometry [See also 14C30.]

- Campana, Frédéric Images directes de cycles compacts par un morphisme et application à l'espace des cycles des tores. 82c:32056
 Kudla, Stephen S. (with Millson, John J.) The Poincaré dual of a geodesic algebraic curve in a quotient of the 2-ball. 82f:32043
 Millson, John J. See Kudla, Stephen S., 82f:32043

secondary classifications:

- Barlet, Daniel Familles analytiques de cycles et classes fondamentales relatives. (82d:32013)
 Demailly, Jean-Pierre (with Skoda, Henri) Relations entre les notions de positivité de P. A. Griffiths et de S. Nakano pour les fibrés vectoriels. (82c:32028)
 Griffiths, Phillip A. See Demailly, Jean-Pierre; et al., (82c:32028)
 Igusa, Jun-ichi On Jacobi's derivative formula and its generalizations. (82c:14053)
 Kawamata, Yujiro (with Viehweg, Eckart) On a characterization of an abelian variety in the classification theory of algebraic varieties. (82c:14028)
 (Nakano, Shigeo) See Demailly, Jean-Pierre; et al., (82c:32028)
 Rusek, Kamil (with Winiarski, Tadeusz) Criteria for regularity of holomorphic mappings. (Russian summary) (82c:32055)
 Shiga, Hiromori One attempt to the $K3$ modular function. II. (82c:32054)
 Skoda, Henri Relèvement des sections globales dans les fibrés semi-positifs. (82c:32027)
 See also Demailly, Jean-Pierre, (82c:32028)
 Usui, Sampo Note on the example of Kinef. (82c:14005)
 Viehweg, Eckart See Kawamata, Yujiro, (82c:14028)
 Winiarski, Tadeusz See Rusek, Kamil, (82c:32055)
 Wong, Pit Mann Holomorphic mappings into abelian varieties. (82d:32018)

32J99 None of the above, but in this section

- Bolibrub, A. A. Example of an unsolvable Riemann-Hilbert problem on CP^2 . (Russian) 82c:32066
 Sakai, Fumio Symmetric powers of the cotangent bundle and classification of algebraic varieties. 82c:32043
 Ueno, Kenji On three-dimensional compact complex manifolds with nonpositive Kodaira dimension. 82c:32030

secondary classifications:

- Ambrogio, Elisabetta (with Romagnoli, Daniela) An elementary example of a Moishezon manifold that is not algebraic. (Italian. English summary) (82c:14047)
 Cattani, Eduardo H. (with Kaplan, Aroldo G.) On the local monodromy of a variation of Hodge structure. (82j:32049)
 Fujita, Takao On Kähler fiber spaces over curves. (82c:32024)
 On the structure of polarized manifolds with total deficiency one. I. (82a:14015)
 On the structure of polarized manifolds with total deficiency one. II. (82j:14034)
 Gerritzen, Lothar (with van der Put, Marius) ★Schottky groups and Mumford curves. (82j:10053)
 Kaplan, Aroldo G. See Cattani, Eduardo H., (82j:32049)
 van der Put, Marius See Gerritzen, Lothar, (82j:10053)
 Romagnoli, Daniela See Ambrogio, Elisabetta, (82c:14047)
 Wilson, P. M. H. On complex algebraic varieties of general type. (82c:14008)

32Kxx Generalizations of analytic spaces (should also be assigned at least one other classification number in this section)

32K05 Banach analytic spaces [See also 58Bxx.]

secondary classifications:

- Fujiki, Akira Countability of the Douady space of a complex space. (82c:32037)

32K10 Non-Archimedean analytic spaces

- Bosch, Siegfried A rigid analytic version of M. Artin's theorem on analytic equations. 82c:32067
 Fieseler, Karl-Heinz Zariski's Main Theorem für affinoid Kurven. 82b:32044

secondary classifications:

- Bosch, Siegfried Formelle Standardmodelle hyperelliptischer Kurven. (82b:14018)
 Gerritzen, Lothar Zur analytischen Beschreibung des Raumes der Schottky-Mumford-Kurven. (82m:14014)

32K15 Differentiable functions on analytic spaces, differentiable spaces [See also 58C25.]

secondary classifications:

- Gerritzen, Lothar (with van der Put, Marius) ★Schottky groups and Mumford curves. (82j:10053)
 van der Put, Marius See Gerritzen, Lothar, (82j:10053)
 Teufel, Michael Glättung endlich-differenzierbarer Räume. (English summary) (82f:58003)

32K99 None of the above, but in this section

secondary classifications:

- Dineen, Seán Topological properties inherited by certain subspaces of holomorphic functions. (82m:46050)
 Moraes, Luiz A. Holomorphic functions on strict inductive limits. (82m:46051)
 Riemer, Rolf-Ingrahm Eine Verallgemeinerung topologischer Mannigfaltigkeiten. (82c:58008)

32Lxx Holomorphic fiber spaces [See also 55Rxx.]

secondary classifications:

- (Hughston, L. P.) See Advances in twistor theory, (82c:83002)
 (Ward, Richard Samuel) See Advances in twistor theory, (82c:83002)
 Advances in twistor theory ★Advances in twistor theory. (82c:83002)
 Twistor theory ★Advances in twistor theory. (82c:83002)

32L05 Holomorphic fiber bundles and generalizations

- Ch'ng, Shou Ch'ng Subbundles of the tangent bundle of hypersurface of complex projective space. 82j:32056
 Morimoto, Hiroshi Realization of Chern classes by subvarieties with certain singularities. 82c:32045
 Parigi, Giuliano Sur la simplification par les tores complexes. 82c:32031
 Rabinowitz, Joshua H. Finsler structures of negative curvature in C-linear fibre spaces. 82c:32068
 Ramis, Jean-Pierre Une remarque sur les complexes différentiels de fibrés holomorphes. (English summary) 82f:32044
 Suwa, Tatsuo Deformations of holomorphic Seifert fiber spaces. 82m:32024
 Yuan, Hsi Shih Subbundles of the tangent bundle of complex projective space. 82j:32056

secondary classifications:

- Atiyah, Michael F. (with Hitchin, N. J.; Drinfel'd, V. G.; Manin, Ju. I.) Construction of instantons. (82g:81049)
 Drinfel'd, V. G. See Atiyah, Michael F.; et al., (82g:81049)
 Gelfand, I. M. (with Gindikin, S. G.; Graev, M. I.) Problems of integral geometry connected with integration of differential forms over lines in a three-dimensional projective space. (Russian. English summary) (82g:53078)
 (with Gindikin, S. G.; Graev, M. I.) Problems of integral geometry in projective space that are connected with the integration of differential forms. (Russian. English summary) (82g:53079)
 Gindikin, S. G. See Gelfand, I. M.; et al., (82g:53078) and (82g:53079)
 Graev, M. I. See Gelfand, I. M.; et al., (82g:53078) and (82g:53079)
 Hitchin, N. J. See Atiyah, Michael F.; et al., (82g:81049)
 Ishikawa, Kunio (with Sakane, Yusuke) On complex projective bundles over a Kähler C-space. (82c:53086)
 (Malgrange, Bernard) See Ramis, Jean-Pierre, (82b:58004)
 Manin, Ju. I. See Atiyah, Michael F.; et al., (82g:81049)
 (Mattei, J.-F.) See Ramis, Jean-Pierre, (82b:58004)
 (Moussu, R.) See Ramis, Jean-Pierre, (82b:58004)
 Newstead, P. E. Correction to: "Rationality of moduli spaces of stable bundles" [Math. Ann. 215 (1975), 251-268; MR 54 #7468]. (82d:14011)
 Penkov, I. B. The Penrose transform on general Grassmannians. (82j:14013)
 Pranger, Walter Riemann surfaces and bounded holomorphic functions. (82c:30067)
 Ramana, S. Orthogonal and spin bundles over hyperelliptic curves. (82g:14022)
 Ramis, Jean-Pierre Frobenius avec singularités [d'après B. Malgrange, J. F. Mattei et R. Moussu]. (82b:58004)
 Sakane, Yusuke See Ishikawa, Kunio, (82c:53086)
 Suwa, Tatsuo Deformations of complex analytic Seifert fibre spaces. (Japanese) (82m:32017)

32L10 Sheaves and cohomology of sections of holomorphic vector bundles, general results [See also 18F20, 55N30.]

- Henkin, G. M. Representation of Yang-Mills equations in the form of Cauchy-Riemann equations on the twistor space. (Russian) 82c:32041
 Jemane, B. Groupes de cohomologie d'un fibré holomorphe à base et à fibre de Stein. 82j:32057
 Mihai, Alexandru Un théorème de type Hamilton-Cayley pour la classe d'Atiyah. 82m:32025
 Silva, Alessandro Some properties of positive line bundles on 1-convex analytic spaces. 82b:32046

secondary classifications:

- Brun, Jérôme Les fibrés de rang deux sur P_2 et leurs sections. (English summary) (82f:14015)
 Daoudi, Mohammed Fibrés biuniformes sur $P_2(C)$. (82g:14019a)
 Drezet, Jean-Marc Fibrés uniformes de type $(1, 0, \dots, 0, -1)$ sur P_2 . (English summary) (82j:14010)
 Fibrés uniformes de type $(0, \dots, 0, -1, \dots, -1)$ sur P_2 . (82j:14011)
 Elia, P. Des fibrés uniformes non homogènes et indécomposables de rang $(2n+1)$ sur $P^n(C)$, $n \geq 3$. (82g:14019b)
 Flaherty, Edward J., Jr. Complex variables in relativity. (82g:83019)
 Gindikin, S. G. Twistor representation of the solutions of Maxwell's system. (Russian) (82f:78003)

- Henkin, G. M. (with Manin, Ju. I.) Twistor description of classical Yang-Mills-Dirac fields. (82f:81045)
- Hotta, Kōsaku On the fundamental system of neighborhoods of a subspace in a complex space. (82e:32022)
- Itoh, Mitsuhiro Moduli of anti-self-dual connections on Kähler manifolds. (82g:53041)
- Manin, Ju. I. See Henkin, G. M., (82f:81045)
- Rubcov, V. N. Cohomology of the Der-complex. (Russian) (82a:13007)
- Spindler, Heinz Die Modulräume stabiler 3-Bündel auf P_3 mit den Chernklassen $c_1=0$, $c_3=c_2^2-c_2$. (82g:14023)

32L15 Bundle convexity [See also 32F10.]

- Frankel, Robert Some remarks on positive vector bundles. 82f:32045
- Rabinowitz, Joshua H. Positivity notions for holomorphic line bundles over compact Riemann surfaces. 82c:32069

secondary classifications:

- Ballico, Edoardo Principal bundles over q -complete complex spaces. (Italian. English summary) (82j:32037)
- O'Brian, Nigel R. (with Toledo, Domingo; Tong, Yue Lin L.) Hirzebruch-Riemann-Roch for coherent sheaves. (82f:32022)
- Takegoshi, Kenshō Weak and strong pseudoconvexities. (82f:32030)
- Toledo, Domingo See O'Brian, Nigel R.; et al., (82f:32022)
- Tong, Yue Lin L. See O'Brian, Nigel R.; et al., (82f:32022)

32L20 Vanishing theorems

- Demaily, Jean-Pierre (with Skoda, Henri) Relations entre les notions de positivités de P. A. Griffiths et de S. Nakano pour les fibrés vectoriels. 82h:32028
- Gigante, Giuliana Vector bundles with semidefinite curvature and cohomology vanishing theorems. 82k:32070
- (Griffiths, Phillip A.) See Demaily, Jean-Pierre; et al., 82h:32028
- (Nakano, Shigeo) See Demaily, Jean-Pierre; et al., 82h:32028
- Ohsawa, Takeo On $H^{p,q}(X, B)$ of weakly 1-complete manifolds. 82j:32058
- Skoda, Henri Relèvement des sections globales dans les fibrés semi-positifs. 82h:32027
- Remarques à propos des théorèmes d'annulation pour les fibrés semi-positifs. 82i:32057
- See also Demaily, Jean-Pierre, 82h:32028
- Takegoshi, Kenshō A generalization of vanishing theorems for weakly 1-complete manifolds. 82f:32046

secondary classifications:

- Frankel, Robert Some remarks on positive vector bundles. (82f:32045)
- Erratum: "A differential geometric criterion for Moishezon spaces" [Math. Ann. 241 (1979), no. 2, 107-112; MR 80i:32057]. (82a:32023)
- Michelson, M. L. Clifford and spinor cohomology of Kähler manifolds. (82d:53041)
- Ohsawa, Takeo Weakly 1-complete manifold and Levi problem. (82j:32031)
- Page, Don N. A periodic but nonstationary gravitational instanton. (82e:83020)
- Williams, Floyd L. Vanishing theorems for type $(0, q)$ cohomology of locally symmetric spaces. (82k:22013)

32L99 None of the above, but in this section

- Gel'fand, I. M. (with Gindikin, S. G.; Graev, M. I.) Some questions connected with the integration of differential forms along planes in RP^n and CP^n . (Russian. English summary) 82i:32058
- Gindikin, S. G. See Gel'fand, I. M.; et al., 82i:32058
- Graev, M. I. See Gel'fand, I. M.; et al., 82i:32058

secondary classifications:

- Eastwood, Michael G. (with Ginsberg, Matthew L.) Duality in twistor theory. (82k:32055)
- Ginsberg, Matthew L. See Eastwood, Michael G., (82k:32055)
- Golubeva, V. A. Hypergeometric Appell and Kampé de Fériet functions of two variables. (Russian) (82j:58004)
- Nishino, Toshio Value distribution of analytic functions of two variables. (Japanese) (82j:32001)
- Penrose, Roger (with Ward, Richard Samuel) Twistors for flat and curved space-time. (82j:83001)
- Prill, David Primitive holomorphic maps of curves. (82a:30056)
- Ward, Richard Samuel See Penrose, Roger, (82j:83001)

32Mxx Complex spaces with a group of automorphisms

- (Ebner, Leo) See Hua, Luo Geng, 82c:32032
- (Graev, M. I.) See Hua, Luo Geng, 82c:32032
- Hua, Luo Geng ★Harmonic analysis of functions of several complex variables in the classical domains. 82c:32032
- (Korányi, Adam) See Hua, Luo Geng, 82c:32032

secondary classifications:

- Satake, Ichirō ★Algebraic structures of symmetric domains. (82i:32003)

32M05 Complex Lie groups, automorphism groups of complex spaces [See also 22E10.]

- Kodama, Akio On the equivalence problem for a certain class of generalized Siegel domains. I. 82c:32033a

- On the equivalence problem for a certain class of generalized Siegel domains. II. 82c:32033b
- Takeuchi, Shigeru Equivariant complexifications of Cauchy-Riemann actions. 82i:32047
- Urata, Toshio Holomorphic automorphisms and cancellation theorems. 82h:32029

secondary classifications:

- Goto, Morikumi (with Uesu, Kagumi) Left invariant Riemannian metrics on complex Lie groups. (82i:53042)
- Mostow, G. D. (with Siu, Yum Tong) A compact Kähler surface of negative curvature not covered by the ball. (82f:53075)
- Shiga, Kiyoshi A geometric characterization of open balls. (82j:53108)
- Siu, Yum Tong See Mostow, G. D., (82f:53075)
- Špiž, G. B. Classification of irreducible locally transitive linear Lie groups. (Russian) (82j:22007)
- Uesu, Kagumi See Goto, Morikumi, (82i:53042)

32M10 Homogeneous complex manifolds [See also 14M17, 57T15.]

- D'Atri, Joseph E. The curvature of homogeneous Siegel domains. 82h:32030
- Kimel'fel'd, B. N. See Vinberg, E. A., 82e:32042
- Lu, Qi Keng See Zhong, Jia Qing, 82k:32071
- Pjaseckii, V. S. A finiteness theorem for convex cones of finite type. (Russian) 82a:32037
- Classification of convex cones of finite type of rank four. (Russian) 82i:32059
- Sakane, Yūsuke (with Takeuchi, Masaru) On defining equations of symmetric submanifolds in complex projective spaces. 82g:32034
- Takeuchi, Masaru See Sakane, Yūsuke, 82g:32034
- Tsuji, Tadashi A characterization of homogeneous self-dual cones. 82i:32060
- Vinberg, E. A. (with Kimel'fel'd, B. N.) Homogeneous domains on flag manifolds and spherical subsets of semisimple Lie groups. (Russian) 82e:32042
- Vinberg, E. B. Invariant convex cones and orderings in Lie groups. (Russian) 82c:32034
- Xu, Yi Chao A note on homogeneous Siegel domains. (Chinese) 82g:32035
- Zhong, Jia Qing (with Lu, Qi Keng) The realization of affine homogeneous cones. (Chinese) 82k:32071

secondary classifications:

- Bracken, A. J. (with Leemon, H. I.) A new set of coherent states for the isotropic harmonic oscillator: coherent, angular momentum states. (82h:81073)
- Debiard, Amédée Espaces H^p au dessus de l'espace hermitien hyperbolique de C^n ($n > 1$). II. (English summary) (82m:43016)
- De Cecco, Giuseppe Lie algebra and holomorphic p -sectional curvatures of a complex homogeneous space. (Italian. English summary) (82f:53059)
- Dorfmeister, J. Quasiclans. (82i:17012)
- Flato, Moshe (with Fronsdal, C.) Quantum field theory of singletons. The Rac. (82j:81048)
- Fronsdal, C. See Flato, Moshe, (82j:81048)
- Kimel'fel'd, B. N. Reductive groups that are locally transitive on quadrics. (Russian) (82e:53032)
- Homogeneous domains on real quadrics. (Russian) (82e:53073)
- Reductive groups that are locally transitive on the flag manifolds of the orthogonal groups. (Russian. English summary) (82e:53074)
- Kimura, Yoshio On the nullities of Kähler C -spaces in $P_N(C)$. (82a:53063)
- Kodama, Akio On generalized Siegel domains with exponent (c_1, c_2, \dots, c_r) . (82d:32002)
- Leemon, H. I. See Bracken, A. J., (82h:81073)
- Lübke, Martin Beweis einer Vermutung von Hartshorne für den Fall homogener Mannigfaltigkeiten. (82e:32031)
- Morimoto, Mitsuo Analytic functionals on the Lie sphere. (82c:32006)
- Muro, Masakazu On prehomogeneous vector spaces related to binary cubic forms. II. The homology diagrams and the Fourier transforms. (82k:58098)
- Oniščik, A. L. Transitive actions on Borel manifolds. (Russian) (82c:53033)
- Rubenthaler, Hubert Espaces vectoriels prhomogènes, sous-groupes paraboliques et \mathfrak{sl}_2 -triplets. (English summary) (82h:17007)

32M15 Hermitian symmetric spaces, bounded symmetric domains [See also 22E10, 22E40, 53C35, 57T15.]

- Debiard, Amédée (with Gaveau, Bernard) Encadrement de la fonction de Green d'un espace symétrique complexe. (English summary) [Estimates for the Green function of a complex symmetric space] 82j:32059
- Drucker, Daniel S. Simplified descriptions of the exceptional bounded symmetric domains. 82d:32025
- Franzoni, Tullio The group of holomorphic automorphisms in certain J^* -algebras. 82m:32026
- Gaveau, Bernard See Debiard, Amédée, 82j:32059
- Korányi, Adam Wiener-Hopf operators on bounded symmetric domains. 82m:32027
- Lundquist, R. Zelow Curvature of quasymmetric Siegel domains. 82c:32035
- Mitchell, Josephine Lipschitz spaces of holomorphic and pluriharmonic functions on bounded symmetric domains in C^N ($N > 1$). 82i:32061
- Schempp, Walter Schwartz kernels on Siegel II domains. 82c:32036
- Stoll, Manfred Radial limits of the Poisson kernel on the classical Cartan domains. 82c:32037
- Taylor, John Christopher Fine and admissible convergence for the unit ball in C^n . 82c:32043
- Viguet, Jean-Pierre Sur la convexité des domaines bornés cercles homogènes. 82c:32044

secondary classifications:

- Cahen, Michel (with Gutt, Simone) Invariant \star -products of holomorphic functions on the hyperbolic Hermitian spaces. (82k:58018)

- Ch'en, Wu Yung Lipschitz spaces of holomorphic functions over bounded symmetric domains in \mathbb{C}^n . (82j:46034)
- Coifman, R. R. (with Rochberg, R. H.) Representation theorems for holomorphic and harmonic functions in L^p . (82j:32015)
- Dodziuk, Josef Vanishing theorems for square-integrable harmonic forms. (82a:58003)
- Gott, Simone See Caben, Michel. (82a:58018)
- Harris, Lawrence A. A generalization of C^* -algebras. (82e:46089)
- Karasev, V. P. (with Ščepin, L. A.) On the theory of generalized coherent states of SU_n groups. (Russian. English summary) (82a:81026)
- Kamp, Wilhelm Jordan algebras and holomorphy. (82a:17026)
- Makarevič, B. O. Jordan algebras and orbits in symmetric R -spaces. (Russian) (82c:53035)
- Patton, C. M. On representations in cohomology over pseudo-Hermitian symmetric spaces. (82j:81035)
- Quinto, Eric Todd Topological restrictions on double fibrations and Radon transforms. (82g:58064)
- Rochberg, R. H. See Coifman, R. R., (82j:32015)
- Ščepin, L. A. See Karasev, V. P., (82a:81026)
- Stachó, László L. On the existence of fixed points of holomorphic automorphisms. (Italian summary) (82f:58022)
- Sum, Ji Guang Regularization of singular integral equations on a complex hypersphere. (Chinese) (82e:42017)

32M99 None of the above, but in this section

- Suwa, Tatsuo Deformations of holomorphic group actions. 82m:32028

secondary classifications:

- Jafarizadeh, M. A. (with Snyder, M.; Tze, Hsiung Chia) Quaternionic multi- S^4 instantons in general covariant $SU(2)$ Yang-Mills and $HP(n)$ σ -models. (82c:81083)
- Looijenga, Eduard Invariant theory for generalized root systems. (82f:17011)
- Mizuhara, Akira Three-dimensional Hopf manifolds. (Japanese summary) (82i:32028)
- Namikawa, Yukihiko \star Toroidal compactification of Siegel spaces. (82a:32034)
- Snyder, M. See Jafarizadeh, M. A.; et al., (82c:81083)
- Tze, Hsiung Chia See Jafarizadeh, M. A.; et al., (82c:81083)
- Yuzvinsky, Sergey Orthogonal pairings of Euclidean spaces. (82m:15033)

32Nxx Automorphic functions [See also 10Dxx, 20H10, 22E40, 30F35.]

32N05 General theory of automorphic functions of several complex variables

32N10 Automorphic forms

secondary classifications:

- Arakawa, Tsuneo The dimension of the space of cusp forms on the Siegel upper half plane of degree two related to a quaternion unitary group. (82i:10031)
- Cohn, Harvey Minimal geodesics on Fricke's torus-covering. (82i:10033)
- Mendoza, Eduardo R. \star Cohomology of PGL_2 over imaginary quadratic integers. (82g:22012)
- Rallis, S. (with Schiffmann, G.) On a relation between SL_2 cusp forms and cusp forms on tube domains associated to orthogonal groups. (82c:10040)
- Schiffmann, G. See Rallis, S., (82c:10040)

32N15 Automorphic functions in symmetric domains

- Feustel, Jan-Michael \star Volumina der Fundamentalgebiete der Spiegelscheiben Picardscher Modulgruppen. (German) [Volumes of the fundamental domains of the reflection surfaces of the Picard modular groups] 82h:32031

secondary classifications:

- Freitag, Eberhard Eine Bemerkung zur Theorie der Hilbertschen Modulmannigfaltigkeiten hoher Stufe. (82c:10033)
- Holzapfel, Rolf-Peter \star Arithmetische Kugelquotientenflächen. (German) [Arithmetic spherical quotient surfaces] (82a:10030b)
- Namikawa, Yukihiko \star Toroidal compactification of Siegel spaces. (82a:32034)
- Williams, Floyd L. Vanishing theorems for type $(0, q)$ cohomology of locally symmetric spaces. (82k:22013)

32N99 None of the above, but in this section

33-XX SPECIAL FUNCTIONS [33-XX deals with the properties of functions as functions. General systems of orthogonal functions are treated in 42C05. Expansions in orthogonal functions are treated in 42C10, 42C15.]

33-01 Elementary exposition, textbooks

- Sebastian, Hans-Jürgen See Sieber, Norbert. 82k:33001
- Sieber, Norbert (with Sebastian, Hans-Jürgen) \star Spezielle Funktionen. (German) [Special functions] 82k:33001
- Stuart, S. N. Table errata: *A course of modern analysis* [fourth edition, Cambridge Univ. Press, Cambridge, 1927; Jbuch 53, 180] by E. T. Whittaker and G. N. Watson. 82b:33001

- (Watson, G. N.) See Stuart, S. N., 82b:33001
- (Whittaker, E. T.) See Stuart, S. N., 82b:33001

secondary classifications:

- Watson, Eric John \star Laplace transforms and applications. (82m:44001)

33-02 Advanced exposition (research surveys, monographs, etc.)

- Arscott, F. M. The land beyond Bessel: a survey of higher special functions. 82e:33001

33-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Askey, Richard A. Ramanujan's extensions of the gamma and beta functions. (82g:01030)
- Dutka, Jacques The incomplete beta function—a historical profile. (82m:01038)
- (Euler, Leonhard) See Ross, Bertram, (82e:01068)
- (Goldbach, Christian) See Ross, Bertram, (82e:01068)
- (Ramanujan, Srinivasa) See Askey, Richard A., (82g:01030)
- Ross, Bertram Euler's letter to Goldbach announcing the discovery of an integral representation for $x!$. (82e:01068)

33-04 Explicit machine computation and programs (not the theory of computation or programming)

33-06 Proceedings, conferences, etc.

33A10 Exponential and trigonometric functions

- Bondarenko, B. A. Quasihyperbolic and quasitrigonometric functions and their applications to integration of differential equations. (Russian) 82k:33002
- Brosa, U. Two types of integrals containing two hyperbolic sine functions in the denominator of the integrand. 82a:33001
- Chorlton, F. Some infinite integrals. 82c:33001
- van de Lune, J. \star A note on the zeros of Flett's function. 82k:33003
- Shannon, A. G. Arbitrary order circular functions: an extension of results of Glaisher and Lucas. 82a:33002
- Stepanec', O. I. Asymptotic formulas for the roots of the cosine integral. (Russian) 82i:33001

secondary classifications:

- Berndt, Bruce C. (with Wilson, B. M.) Chapter 4 of Ramanujan's second notebook. (82j:01051)
- Fettis, Henry E. On some trigonometric integrals. (82c:33003a)
- Corrigendum: "On some trigonometric integrals". (82c:33003b)
- Kazarnovskii, B. Ja. On zeros of exponential sums. (Russian) (82i:32014)
- (Ramanujan, Srinivasa) See Berndt, Bruce C.; et al., (82j:01051)
- Wilson, B. M. See Berndt, Bruce C., (82j:01051)

33A15 Gamma and beta functions

- Afuwape, Anthony Uyi (with Imoru, Christopher O.) Bounds for the beta function. 82d:33001
- (with Imoru, Christopher O.) Bounds for the beta function. (Italian summary) 82a:33003
- Ahmad, Muhammad See Hirai, Abdul Samad; et al., 82g:33001
- Akhtar, Ahmad Saeed See Hirai, Abdul Samad; et al., 82g:33001
- Andrews, George E. Notes on the Dyson conjecture. 82c:33002
- Askey, Richard A. Some basic hypergeometric extensions of integrals of Selberg and Andrews. 82c:33002
- A q -extension of Cauchy's form of the beta integral. 82m:33001
- Fettis, Henry E. On some trigonometric integrals. 82c:33003a
- Corrigendum: "On some trigonometric integrals". 82c:33003b
- Guha, Bandana Expansion of incomplete gamma function in terms of Jacobi polynomials. 82i:33002
- Hirai, Abdul Samad (with Ahmad, Muhammad; Akhtar, Ahmad Saeed) The incomplete beta function. 82g:33001
- Imoru, Christopher O. See Afuwape, Anthony Uyi, 82a:33003 and 82d:33001
- Kairies, H.-H. Remarks concerning extensions of the gamma function. 82d:33002
- Moak, Daniel S. The q -gamma function for $x < 0$. 82j:33001
- Nishimoto, Katsuyuki On some contour integral representations for beta function and fractional differentiations of the functions $(1-z)^{q-1}$ and z^{p-1} . 82d:33003
- Schell, Hans-Joachim Asymptotische Entwicklungen für die unvollständige Gammafunktion. 82d:33004

secondary classifications:

- Barsky, Daniel On Morita's p -adic gamma function. (82a:12011)
- Dahiya, R. S. Computation of integrals involving gamma and error functions. (82c:44001)
- Dwivedi, B. N. See Singh Chandel, R. C., (82j:33013)
- Koblitz, Neal q -extension of the p -adic gamma function. (82a:12012)
- Okikiola, George Olatokumbo \star Special integral operators. Vol. I. (82d:44002)
- Singh Chandel, R. C. (with Dwivedi, B. N.) The Srivastava and Daoust functions of several variables. (82j:33013)

33A20 Error function, probability integral

secondary classifications:

Chorlton, F. Some infinite integrals. (82c:33001)

33A25 Elliptic functions and integrals

Dumont, Dominique Une approche combinatoire des fonctions elliptiques de Jacobi. (82c:33004)

Ling, Chih Bing On a second solution of van der Pol's differential equation. 82j:33002

Schoenberg, I. J. A direct derivation of a Jacobian identity from elliptic functions. 82j:33003

secondary classifications:

Ahmad, M. Ifikhar (with Taj, Shahadat Ali) Elliptic functions of hyperbolic character. (82f:14039)

Chudnovsky, Gregory V. Algebraic independence of the values of elliptic function at algebraic points. (82f:10047)

Ferrarese, Giorgio The second cohomology group of the sheaf of invertible functions of the theta divisor of a curve of genus 4. (Italian. English summary) (82c:14031)

Filipkowski, S. (with Nowak, M.) Influence of hinge line gap on aerodynamic forces acting on a harmonically oscillating thin profile in an incompressible flow. I, II. (Polish and Russian summaries) (82e:76008)

Kempf, George R. Toward the inversion of abelian integrals. II. (82a:14010b)
Toward the inversion of abelian integrals. I. (82a:14010a)

Montaldi, E. The evaluation of Green's functions for cubic lattices, revisited. (82c:82064)

Nowak, M. See Filipkowski, S. (82e:76008)

Philippon, P. Indépendance algébrique de valeurs de fonctions elliptiques p -adiques.[Algebraic independence of values of p -adic elliptic functions] (82m:10058)

Raab, Werner Kubische und biquadratische Thetafunktionen. I. (82h:10040a)

Kubische und biquadratische Thetafunktionen. II. (82h:10040b)

Rosen, Michael Abel's theorem on the lemniscate. (82g:14041)

Sharaf, Mohamed Adel Expansion theory for the elliptic motion of arbitrary eccentricity and semimajor axis. I. Analyses of the function $F^{(N,n)}(\theta, x_n, \xi_n) = \prod_{i=1}^n (1 - \xi_i \sin^2 \theta)^{n_i}$. (82a:70007)

Shimizu, Atsushi Remarks on theta series. (82a:14018)

Taj, Shahadat Ali See Ahmad, M. Ifikhar, (82f:14039)

Wrigge, Staffan Calculation of the Taylor series expansion coefficients of the Jacobian elliptic function $\operatorname{sn}(x, k)$. (82d:65023)

33A30 Simple hypergeometric functions of one and several variables

Agrawal, Hukum Chand On generating relations of general character. 82b:33002

Expansions involving hypergeometric functions of two and three variables. (Turkish summary) 82i:33003

Agrawal, Ram Kishor See Srivastava, Hari M.; et al., 82h:33006

Ahmed, Shafique (with Muldoon, M. E.) On the zeros of confluent hypergeometric functions. III. Characterization by means of nonlinear equations. 82g:33002

Blise, V. M. See Dighe, Madhavi, 82h:33001

Deshpande, V. L. Inequalities for the triple hypergeometric function F_X . 82k:33005

Certain formulas associated with hypergeometric functions of three variables. 82d:33005

Dighe, Madhavi (with Blise, V. M.) On composition of fractional integral operators as an integral operator with Fourier type kernel. 82h:33001

Dwivedi, B. N. See Singh Chandel, R. C., 82c:33003

Extol, Harold On the reducibility of the triple hypergeometric functions F_E , F_G and H_B . 82c:33004

The basic double hypergeometric transforms. 82c:33004

A note on a hypergeometric transformation. 82h:33002

The Di-Bessel function. 82b:33003

A note on a discontinuous hypergeometric integral. 82g:33003

On the reducibility of the Voigt functions. 82j:33004

Gasper, George Summation formulas for basic hypergeometric series. 82a:33005

Goyal, S. P. On double integrals involving the H -functions. 82g:33004

See also Srivastava, Hari M.; et al., 82h:33006

Jain, R. N. Sum of a well-poised ${}_4F_1(1)$. 82a:33006

Jain, Vinod Kumar Summations of basic hypergeometric series and Rogers-Ramanujan identities. 82f:33001

Some expansions involving basic hypergeometric functions of two variables.

82d:33006

Joshi, C. M. (with Prajapat, M. L.) The operator $T_{k,q}$ and characterization of a class of polynomials by the generalized Rodrigues' formula. 82j:33005Khanna, I. K. Asymptotic behaviour and n th differential formulae for the polynomial set $B_n(x, y)$. 82h:33003

Klesova, L. M. See Vilenkin, N. Ja., 82c:33008

Marichev, O. I. A method for calculating integrals of hypergeometric functions. (Russian. English summary) 82i:33005

Mathur, B. L. Some results concerning a special function of several complex variables. 82h:33004

Milne, Stephen C. A multiple series transformation of the very well poised ${}_{2k+4}\Psi_{2k+4}$. 82d:33007

Muldoon, M. E. See Ahmed, Shafique, 82g:33002

Munot, P. C. (with Padmanabham, P. A.) Integrals involving the generalized Lauricella function. 82c:33005

Padmanabham, P. A. See Munot, P. C., 82c:33005

(Parihar, C. L.) See Srivastava, Hari M., 82j:33008

Pathan, M. A. See Srivastava, Hari M., 82g:33009

Prajapat, M. L. See Joshi, C. M., 82j:33005

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hypergeometric functions of several variables. 82c:33003

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82i:33007

Vilenkin, N. Ja. (with Klesova, L. M.) The continuum parts of the bases on the hyperboloid $[x, x] = -1$. 82c:33008

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Ashbaugh, Mark S. (with Morgan, John D., III) Remarks on Turchner's eigenvalue formula. (82d:81036)

Cohen, Edgar A., Jr. A note on normal functions of normal random variables.

(82h:60029)

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Dwivedi, A. P. (with Trivedi, T. N.) Some further dual series equations involving

generalised Bateman K -functions. (82m:45009)

Furukawa, Masao A new direct proof of the expansion of a Coulomb-distorted plane wave in Coulomb-distorted spherical waves. (82m:81068)

Godinho, Pedro Henrique The h -step hypergeometric distribution. (Portuguese. English summary) (82e:05014)

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Gorelov, V. A. On the algebraic independence of the values of some E -functions. (Russian. English summary) (82e:10062)Joshi, C. M. (with Arya, J. P.) Concerning some properties of the H -function of several variables. (82h:33010)

Joshi, J. M. C. On Joshi's generalized Stieltjes transform. (82g:44005)

Joshi, V. G. (with Saxena, Rajendra K.) Abelian theorems for distributional

 H -transform. (82m:44007)

Lizarev, A. D. Two fundamental systems of solutions of a class of equations of the mechanics of a deformable body. (Russian) (82d:73058)

Mathur, Renu See Munot, P. C., (82c:34042)

Mittal, K. C. Some new generating functions for Lagrange's polynomials. (82g:33029)

Morgan, John D., III See Ashbaugh, Mark S., (82d:81036)

Munot, P. C. (with Mathur, Renu) On nonlinear oscillation problem. (82c:34042)

Raina, B. K. Generalized Taylor's series and summation. (82m:40002)

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Saxena, Rajendra K. See Joshi, V. G., (82m:44007)

Shah, Manilal An integral transform pair for H -function. (82e:44002)

Sidi, Avram A new method for deriving Padé approximants for some hypergeometric functions. (82d:65021)

Singh, Nam Prasad A class of integral transforms in two variables. (82j:44006)

Smirnov, M. M. On a Volterra equation with a hypergeometric function in the kernel. (Russian. English summary) (82i:45001)

Tarasov, V. F. Calculation of radial Slater integrals using Appell functions. (Russian. Kazakh summary) (82g:81116)

Temme, N. M. On the expansion of confluent hypergeometric functions in terms of Bessel functions. (82d:65022)

Trivedi, T. N. See Dwivedi, A. P., (82m:45009)

Vitanov, Aleksand'r On the solution of a class of generalized hypergeometric differential equations. (Bulgarian) (82g:35018)

A class of solutions of differential equations describing steady-state processes in a medium with variable parameters. (Russian. Bulgarian and English summaries)

(82m:76063)

Wetzel, Helmut Eine arithmetische Eigenschaft der Koeffizienten hypergeometrischer Funktionen mit algebraischen Parametern. (82d:10051)

Wilson, James A. Some hypergeometric orthogonal polynomials. (82a:33014)

33A35 Generalized hypergeometric functions of one and several variables, (*E*-functions, *G*-functions, *H*-functions, etc.)

- Abiodun, R. F. A. (with Sharma, Bhagirath Lal) Generating functions for *G*-function. I. II. **82g:33010**
- Agnihotri, K. C. On expansion of new homogeneous generalised hypergeometric function. I. **82c:33008**
- Agrawal, B. M. (with Kumar, Virendra) Transformations of *q*-hypergeometric series. II. (Hindi. English summary) **82c:33008**
- Agrawal, Ram Kishor Triple-series relations for the *H*-function of two variables. **82d:33009**
See also Kalla, S. L.; et al., **82c:33011**
- Alshaboury, S. See Simary, M. A., **82b:33008**
- Anandani, P. (with Singh, Nam Prasad) Integration of generalized *H*-function of two variables with respect to parameters. II. **82c:33009**
Expansion formulae for the *H*-function in series involving associated Legendre functions. **82b:33004**
See also Singh, Nam Prasad, **82c:33006**
- Arya, J. P. See Joshi, C. M., **82b:33010**
- Bajpai, S. D. An exponential Fourier series for Fox's *H*-function. **82b:33005**
- Bhise, V. M. (with Dange, A. V.) Inequality for triple hypergeometric function. **82c:33010**
- Buschman, R. G. *H*-functions of two variables. II. **82c:33005b**
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- Chandwani, G. N. Some formulae for generalized hypergeometric polynomials. **82d:33010**
- Chaurasia, V. B. L. An integral involving products of generalized Kampé de Fériet function and *H*-function of two variables. **82c:33004**
- Dange, A. V. See Bhise, V. M., **82c:33010**
- Dixit, A. K. On some integral relations involving the general *H*-function of several complex variables. **82j:33009**
Contiguous relations for the general *H*-function of several variables. **82j:33010**
- Dwivedi, B. N. See Singh Chandel, R. C., **82j:33013**
- Garg, R. S. See Goyal, S. P., **82c:33009**
- Gautam, G. P. (with Goyal, A. N.) On Fourier kernels and asymptotic expansion. **82c:33009**
- Goyal, A. N. See Gautam, G. P., **82c:33009**
- Goyal, S. P. (with Garg, R. S.) Certain results for multivariate *H*-function involving Jacobi polynomials. **82b:33009**
See also Kalla, S. L.; et al., **82c:33011** and Gupta, K. C., **82m:33004**
- Gupta, K. C. (with Koul, C. L.) An integral involving the *H*-function. **82d:33011**
(with Goyal, S. P.) Unified summation formula for the *H*-function of two variables. II. **82m:33004**
- Gupta, R. K. See Sharma, Shri Deo, **82m:33005**
- Joshi, C. M. (with Arya, J. P.) Concerning some properties of the *H*-function of several variables. **82c:33010**
- Kalia, R. N. (with Rosenberger, Gerhard) Application of two forms of generalized Taylor's theorem to Fox's *H*-function. **82j:33011**
- Kalla, S. L. (with Goyal, S. P.; Agrawal, Ram Kishor) On multiple integral transformations. **82b:33011**
- Khan, I. A. Kampé de Fériet's double hypergeometric function and Gegenbauer polynomials. **82f:33003**
- Koul, C. L. See Gupta, K. C., **82d:33011**
- Kumar, Virendra See Agrawal, B. M., **82c:33008**
- Lizarev, A. D. Differential equations of hypergeometric type. (Russian) **82b:33006**
- Mahajan, R. R. (with Saxena, Rajendra K.) Evaluation of finite integrals involving *M*-function of two variables by using *E* operator. (Spanish) **82g:33011**
- Manglik, R. C. Some finite summations involving *H*-function. I. **82c:33011**
- Mathur, B. L. An integral involving generalized Rice polynomials and a generalized function of *N* variables. (Spanish) **82c:33010**
An expansion formula for a generalized function of *n* variables. (Hindi. English summary) **82i:33006**
- Munot, P. C. (with Padmanabham, P. A.) On Lauricella's *n*-variable function $F_4^{(n)}$. **82c:33007**
- Padmanabham, P. A. See Munot, P. C., **82c:33007**
- Philip, Varughese A double integral involving the *H*-function of two variables. **82c:33011**
- Pradhan, K. M. An integral involving the generalized associated Legendre function and the double *H*-function. **82b:33007**
- Prasad, Sankatha See Prasad, Y. N., **82g:33012** and **82g:33013**
- Prasad, Y. N. (with Prasad, Sankatha) Expansion formulae for the new *H*-function of two variables. (Turkish summary) **82g:33012**
(with Prasad, Sankatha) Fourier series for Buschman's *H*-function of two variables. (Hindi. English summary) **82g:33013**
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- Rahman, Mizan A stochastic matrix and bilinear sums for Racah-Wilson polynomials. **82c:33007**
- Raina, R. K. See Srivastava, Hari M., **82b:33012**
- Rathie, A. K. On an integral involving *H*-function. (Spanish summary) **82c:33012**
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- Rathie, Navratna Integrals involving the *H*-function. II. (Hindi. English summary) **82f:33004**
- Rosenberger, Gerhard See Kalia, R. N., **82j:33011**
- Saxena, Rajendra K. See Mahajan, R. R., **82g:33011**
- Saxena, Ram Kishore On the *H*-function of *n*-variables. II. **82g:33015**
- Shah, Manilal On some results involving *H*-functions. **82g:33016**
- Sharma, Bhagirath Lal See Abiodun, R. F. A., **82g:33010**
- Sharma, Shobha Some reduction formulae. **82f:33005**
- Sharma, Shri Deo An integral relation involving spheroidal functions and the *H*-function of several complex variables. **82c:33013**
(with Gupta, R. K.) On multiple integrals involving generalised *H*-function and spherical functions. **82m:33005**
- Shukla, D. P. Certain transformations of generalised hypergeometric series. **82j:33012**
- Siddiqui, A. (with Prasad, Y. N.; Singh, Awadhesh Kumar) Integrals involving spheroidal wave functions. **82c:33014**
- Simary, M. A. (with Alshaboury, S.) On *G*-transforms. **82b:33008**
- Singh, Awadhesh Kumar See Siddiqui, A.; et al., **82c:33014**
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- Singh, Y. P. Sum of certain well-poised generalized hypergeometric series. **82g:33017**
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- Srivastava, H. S. P. Some results involving generalized function of two variables and Gegenbauer polynomials. **82b:33009**
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- Srivastava, Rekha Definite integrals associated with the *H*-function of several variables. **82d:33016**
- Takano, Kyoichi Monodromy group of the system for Appell's F_4 . **82c:33008**
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- Agrawal, Ram Kishor See Goyal, S. P., (**82j:62034**)
- Bressoud, David M. On the value of Gaussian sums. (**82i:10046**)
- Chikuse, Yasuko Asymptotic distributions of the latent roots with multiple population roots in multiple discriminant analysis. (**82b:62082**)
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- John, R. W. See Haubold, H. J., (**82d:85004**)
- Maurya, R. P. See Prasad, Y. N., (**82c:80005**)
- Nguyen T'en Tai On the estimates of zero orders of polynomials of analytic functions and their application to estimates of the measure of mutual transcendence of *E*-function values. (Russian) (**82i:10043**)
- Pandey, Ram Nakshatra See Singh, O. P., (**82g:33032**)
- Prasad, Y. N. (with Maurya, R. P.) Application of Jacobi polynomial and multivariable *H*-function in heat conduction in nonhomogeneous moving rectangular parallelepiped. (**82c:80005**)
- Rahman, Mizan Families of biorthogonal rational functions in a discrete variable. (**82j:33020**)
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- Singh, Vishwa Nath A note on the nonhomogeneous Gauss equation. (**82g:33008**)
- Sun, Hugo S. See Cohen, M. E., (**82c:05013**)
- Zanovello, Renato On a definite integral of the product of Bessel and Struve functions. (Italian. English summary) (**82c:33018**)

33A40 Cylindrical functions, Bessel functions

- Agarwal, A. K. A theorem on the zeros of certain classical polynomials. **82d:33014**
- Andrews, K. W. A table of maxima and minima of the Bessel functions $J_n(z)$ for $n=0$ to $n=30$. **82j:33014**
- de Bruin, M. G. (with Saff, E. B.; Varga, R. S.) On the zeros of generalized Bessel polynomials. I, II. **82d:33015**
- Cruz, Andrés (with Sesma, Javier) Modulus and phase of the reduced logarithmic derivative of the cylindrical Bessel function. **82b:33010**
- Glasser, M. L. A class of Bessel summations. **82j:33015**
- Grysa, Krzysztof (with Jankowski, Janusz) On summation of certain Dini series. (Polish summary) **82i:33008**
- Hripton, M. D. Group-theoretic properties of generalized Bessel functions that satisfy an ordinary third-order differential equation. (Russian) **82b:33011**
- Ismail, Mourad E. H. The basic Bessel functions and polynomials. **82g:33019**
- Jankowski, Janusz See Grysa, Krzysztof, **82i:33008**
- Laforgia, Andrea On the zeros of Bessel functions. (Italian. English summary) **82i:33009**
- Obi, E. C. Corrigendum: "A note on the Rayleigh polynomials" [SIAM J. Math. Anal. 9 (1978), no. 5, 825-834; MR 80j:33010]. **82c:33009**
- O'Brien, D. M. Spherical Bessel functions of large order. **82c:33010**

- Rao, V. V. L. N. A class of self-reciprocal functions. **82i:33010**
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 Saff, E. B. See de Bruin, M. G.; et al., **82d:33015**
 Sesma, Javier See Cruz, Andrés, **82b:33010**
 Spigler, Renato Errata: "The roots of the equation: $A\mathcal{C}_\nu(x) + Bx\mathcal{C}'_\nu(x) = 0$ " [Atti Sem. Mat. Fis. Univ. Modena 27 (1978), no. 1, 153–166 (1979); MR 81a:33013]. (Italian) **82a:33010**

Some results on the zeros of cylindrical functions and of their derivatives. (Italian. English summary) **82g:33020**

- Stuart, S. N. Nonclassical integrals of Bessel functions. **82g:33021**
 Tošić, Dobroslav D. Some series of a product of Bessel functions. (Serbo-Croatian summary) **82i:33011**
 Varga, R. S. See de Bruin, M. G.; et al., **82d:33015**
 Vilenkin, N. Ja. Calculation of an integral containing Bessel functions. (Russian) **82k:33017**
 Zanovello, Renato On certain formulas for the Struve and Weber functions of integral order. (Italian) **82i:33012**
 On a definite integral of the product of Bessel and Struve functions. (Italian. English summary) **82k:33018**

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- Ahmed, Shafique Potential energies of one-dimensional systems at equilibrium. (French summary) **(82j:81011)**
 Bhise, V. M. See Dighe, Madhavi, **(82h:26022)**
 Dighe, Madhavi (with Bhise, V. M.) On the generalisation of Beesack's extension of Opial's inequality. **(82h:26022)**
 Dwivedi, A. P. (with Trivedi, T. N.) Some further dual series equations involving generalised Bateman K-functions. **(82m:45009)**
 Exton, Harold A basic analogue of the Bessel-Clifford equation. **(82j:39002)**
 Filippov, Ju. F. Calculation of indefinite integrals containing certain special functions. (Russian) **(82g:33041)**
 Freeden, Willi See Müller, Claus, **(82d:10071)**
 Hačik, Miloš Some analogues for higher monotonicity of the Sonin-Butlewski-Pólya theorem. (Russian summary) **(82f:34034)**
 Holman, Wayne J., III Generalized Bessel functions and the representation theory of $U(2) \otimes C^{2 \times 2}$. **(82a:22015)**
 Klesova, L. M. See Vilenkin, N. Ja., **(82c:33006)**
 Miles, John W. The second Painlevé transcendent: a nonlinear Airy function. **(82g:34008)**
 Müller, Claus (with Freeden, Willi) Multidimensional Euler and Poisson summation formulas. **(82d:10071)**
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 Olver, Frank W. J. Whittaker functions with both parameters large: uniform approximations in terms of parabolic cylinder functions. **(82c:34068)**
 Pak, I. N. Series in Bessel functions. (Russian) **(82d:42033)**
 Pietzsch, Wolfgang See Werner, Udo, **(82f:33009)**
 Rozenbljum, A. V. (with Rozenbljum, L. V.) Representations of the group of motions of n -dimensional Euclidean space and Bessel functions of matrix index. (Russian. English summary) **(82h:22029)**
 Rozenbljum, L. V. See Rozenbljum, A. V., **(82h:22029)**
 Trivedi, T. N. See Dwivedi, A. P., **(82m:45009)**
 Vilenkin, N. Ja. (with Klesova, L. M.) The continuum parts of the bases on the hyperboloid $[x, x] = -1$. **(82c:33008)**
 Werner, Udo (with Pietzsch, Wolfgang) Die Polynome $S_\nu(x)$ zur Darstellung der Energiespektralfunktionen idealer Turbulenzfelder. **(82f:33009)**

33A45 Spherical functions (Legendre polynomials and functions, spherical harmonics), ultraspherical polynomials

- Antonov, V. A. (with Holševnikov, K. V.) Estimation of a remainder of a Legendre polynomial generating function expansion (generalization and refinement of the Bernstein inequality). (Russian. English summary) **82b:33012**
 (with Holševnikov, K. V.) Estimation of the complete variation of the Legendre polynomial. (Russian. English summary) **82k:33019**
 Bressoud, David M. Linearization and related formulas for q -ultraspherical polynomials. **82c:33013**
 Bustoz, J. Two-parameter Turán inequalities for ultraspherical and Laguerre polynomials. **82d:33016**
 Dewan, R. K. Laguerre polynomials of several arguments. **82c:33011**
 Holševnikov, K. V. See Antonov, V. A., **82b:33012** and **82k:33019**
 Laforgia, Andrea A monotonic property for the zeros of ultraspherical polynomials. **82j:33016**
 Laursen, M. L. (with Mita, Katsunori) Some integrals involving associated Legendre functions and Gegenbauer polynomials. **82f:33006**
 Lopatinskii, Ja. B. Some properties of spherical functions. (Russian) **82g:33022**
 Mishra, K. K. (with Sharma, Krishna Gopal) On strong summability of ultraspherical series. **82h:33013**
 Mita, Katsunori See Laursen, M. L., **82f:33006**
 Monegato, Giovanni Some new inequalities related to certain ultra-spherical polynomials. **82c:33014**
 Prabhakar, T. R. (with Tomar, R. C.) Some integrals and series relations for biorthogonal polynomials suggested by the Legendre polynomials. **82b:33013**
 Rautela, S. S. On the degree of approximation to the generating function by its ultraspherical expansion on a sphere. (Hindi. English summary) **82c:33015**
 Saha, Bibhiti Bhushan On a generating function of ultraspherical polynomials. **82i:33013**
 Sharma, Krishna Gopal See Mishra, K. K., **82h:33013**
 Tomar, R. C. See Prabhakar, T. R., **82b:33013**

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- Askey, Richard A. (with Ismail, Mourad E. H.) The Rogers q -ultraspherical polynomials. **(82h:42026)**
 Dubovik, O. A. Representation of a group of conformal motions of Euclidean space and Legendre functions on the cut. (Russian) **(82f:22016)**
 Everitt, W. N. Legendre polynomials and singular differential operators. **(82m:34020)**
 Gadjiev, A. D. Differential properties of the symbol of a multidimensional singular integral operator. (Russian) **(82c:42017)**
 Ganapathy, M. K. See Swaminathan, V., **(82h:40012b)**
 Ismail, Mourad E. H. See Askey, Richard A., **(82h:42026)**
 Klesova, L. M. See Vilenkin, N. Ja., **(82c:33006)**
 Laforgia, Andrea On the zeros of Bessel functions. (Italian. English summary) **(82i:33009)**
 Martins, Pedro de A. P. Spherical Coulomb functions: recurrence relations and continued fractions. **(82g:65014)**
 O'Brien, D. M. Spherical Bessel functions of large order. **(82c:33010)**
 Srivastava, H. S. P. Integration with respect to parameters of products involving generalized Legendre functions and a generalized function of two variables. **(82g:33018)**
 Srivastava, Hari M. Some generating functions for Laguerre and Bessel polynomials. **(82g:33033)**
 Stanton, Robert J. (with Weinstein, Alan D.) On the L^4 norm of spherical harmonics. **(82d:58015)**
 Strahov, V. N. Synthesis of series expansion of external gravitational potential in spherical functions. (Russian) **(82d:86009)**
 Stuart, S. N. Nonclassical integrals of Bessel functions. **(82g:33021)**
 Swaminathan, V. A note on the $[5, f(x)]$ means. **(82h:40012a)**
 (with Ganapathy, M. K.) $[f, f(x)]$ summability of Legendre series. **(82h:40012b)**
 Vilenkin, N. Ja. (with Klesova, L. M.) The continuum parts of the bases on the hyperboloid $[x, x] = -1$. **(82c:33008)**
 Volkmer, Hans Integralrelationen mit variablen Grenzen für spezielle Funktionen der mathematischen Physik. **(82d:33017)**
 Volobuev, I. P. Plane waves on the sphere and some of their applications. (Russian. English summary) **(82c:43012)**
 Weinstein, Alan D. See Stanton, Robert J., **(82d:58015)**

33A50 Gegenbauer functions

- Zayed, Ahmed I. On the singularities of Gegenbauer (ultraspherical) expansions. **82c:33016**

secondary classifications:

- Brown, James Ward (with Roman, Steven M.) Inverse relations for certain Sheffer sequences. **(82b:33015)**
 Laursen, M. L. (with Mita, Katsunori) Some integrals involving associated Legendre functions and Gegenbauer polynomials. **(82f:33006)**
 Mita, Katsunori See Laursen, M. L., **(82f:33006)**
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 Saha, Bibhiti Bhushan On a generating function of ultraspherical polynomials. **(82i:33013)**
- ### 33A55 Lamé, Mathieu, spheroidal wave functions
- Barrett, W. Mathieu functions of general order: connection formulae, base functions and asymptotic formulae. I. Introduction. **82j:33017a**
 Mathieu functions of general order: connection formulae, base functions and asymptotic formulae. II. Connection formulae and base functions. **82j:33017b**
 Mathieu functions of general order: connection formulae, base functions and asymptotic formulae. III. The Liouville-Green method and its extensions. **82j:33017c**
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 Schäffe, F. W. Zur Theorie der Neumannschen und Kapteynschen Reihen. **82c:33017**
 Volkmer, Hans Integralrelationen mit variablen Grenzen für spezielle Funktionen der mathematischen Physik. **82d:33017**

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- Prasad, Y. N. See Siddiqui, A.; et al., **(82k:33014)**
 Sharma, Shri Deo An integral relation involving spheroidal functions and the H -function of several complex variables. **(82k:33013)**
 Siddiqui, A. (with Prasad, Y. N.; Singh, Awadhesh Kumar) Integrals involving spheroidal wave functions. **(82k:33014)**
 Singh, Awadhesh Kumar See Siddiqui, A.; et al., **(82k:33014)**

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33A65 Orthogonal special functions and polynomials (Čebyšev, Hermite, Jacobi, Laguerre, etc.)

- Agarwal, A. K. (with Manocha, H. L.) On further extension of bilateral generating functions for certain special functions. **82b:33014**
 Agrawal, Hukam Chand Generalized Laguerre polynomials and the polynomials related to them. **82i:33014**
 Ainsworth, O. R. (with Morris, Joseph E., Jr.) A property of quasi-orthogonal polynomials. **82d:33018**
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- Beta, Hajrudin O. An orthogonal set based on Bessel functions of the first kind. (Serbo-Croatian summary) **82i:33015**
- Bhargava, S. K. See Singh Chandel, R. C. **82h:33016**
- de Branges, Louis (with Trutt, David) Orthogonal Newton polynomials. **82j:33018**
- Brown, James Ward Steffensen sequences satisfying a certain composition law. **82i:33014**
(with Roman, Steven M.) Inverse relations for certain Sheffer sequences. **82h:33015**
- de Bruin, M. G. (with Saff, E. B.; Varga, R. S.) On two conjectures on the zeros of generalized Bessel polynomials. **82c:33018**
- Calogero, Francesco Matrices, differential operators, and polynomials. **82g:33023**
- Carroll, Robert Wayne (with Gilbert, John E.) Scattering techniques in transmutation and some connection formulas for special functions. **82c:33019**
- Čelko, Milan Orthogonal polynomials with a weight that has a zero point inside the interval of orthogonality. (Slovak) **82h:33016**
- Chatterjea, S. K. Some multilateral generating functions. **82k:33020**
- Criř, M. M. Asymptotic properties of generalized Faber polynomials of two variables and of orthogonal polynomials connected with them. (Russian) **82g:33024**
- Dunkl, Charles F. A difference equation and Hahn polynomials in two variables. **82i:33007**
- Dwivedi, A. P. (with Gupta, P. M.) Quadruple series equations involving Jacobi polynomials of different indices. **82g:33025**
- Exton, Harold A basic analogue of Hermite's equation. **82d:33019**
- Gautschi, Walter Minimal solutions of three-term recurrence relations and orthogonal polynomials. **82m:33006**
- Gilbert, John E. See Carroll, Robert Wayne. **82c:33019**
- Gupta, P. M. See Dwivedi, A. P. **82g:33025**
- Hansen, Eldon Sums of functions satisfying recursion relations. **82m:33007**
- Höa, H. V. Some relations between Jacobi and ultraspherical polynomials. **82k:33021**
- Hussain, M. A. (with Singh, Surya Narain) Operational formulae for orthogonal polynomials related to Hermite polynomials. **82m:33008**
- Jain, Sudha See Prabhakar, T. R. **82g:33030**
- Jaroč, Otakar Integral representation of orthogonal exponential polynomials. (Czech summary) **82h:33017**
- Joshi, C. M. (with Prajapat, M. L.) On some properties of a class of polynomials unifying the generalized Hermite, Laguerre and Bessel polynomials. **82a:33011**
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- Karande, B. K. Generating functions for classical orthogonal polynomials by Fujiwara-Thakare method. **82d:33020**
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- Kasumov, N. M. A discrete analogue of Legendre polynomials. (Russian. Azerbaijani and English summaries) **82m:33009**
- Khan, I. A. A note on a generating relation. **82g:33026**
- Kida, Sôsaburô See Ogawa, Shiro; et al. **82j:33019**
- Krall, Allan M. On complex orthogonality of Legendre and Jacobi polynomials. **82g:33027**
- Orthogonal polynomials satisfying fourth order differential equations. **82d:33021**
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- Kumar, Kailash Relation between polynomials orthogonal with respect to a class of Gaussian weight functions. **82c:33022**
- Manocha, H. L. See Agarwal, A. K. **82h:33014**
- Marcellán Español, Francisco Equivalence between the formulas fundamental to the theory of orthogonal polynomials in Cassinians. (Spanish. English summary) **82g:33028**
- Maroni, Pascal Une généralisation du théorème de Favard-Shohat sur les polynômes orthogonaux. (English summary) [A generalisation of the Favard-Shohat theorem on orthogonal polynomials] **82i:33017**
- Meixner, Josef Orthogonal polynomials in the theory of Mathieu functions. I. **82i:33008**
- Mittal, K. C. Some new generating functions for Lagrange's polynomials. **82g:33029**
- Moak, Daniel S. The q -analogue of the Laguerre polynomials. **82i:33018**
- Morris, Joseph E., Jr. See Ainsworth, O. R. **82d:33018**
- Ogawa, Shiro (with Kida, Sôsaburô; Arioka, Shigekatsu) An extension of Christoffel-Darboux' identity and its application. **82j:33019**
- Pandey, Ram Nakshatra See Singh, O. P. **82d:33022** and **82g:33032**
- Pathak, R. S. Expansion of distributions in terms of heat polynomials. **82i:33019**
- Patil, K. R. (with Thakare, N. K.) Operational formulas and generating functions in the unified form for the classical orthogonal polynomials. **82c:33020**
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- Prabhakar, T. R. (with Jain, Sudha) On a general class of polynomials relevant to quantum mechanics. **82g:33030**
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- Rahman, Mizan A product formula and a nonnegative Poisson kernel for Racah-Wilson polynomials. **82c:33012**
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- Rai, P. N. (with Singh, Surya Narain) Certain properties of a set of generalized polynomials. **82i:33020**
- Reva See Prabhakar, T. R. **82h:33015**
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- Sadlok, Zbigniew On Hermite expansion of x_f^2 . **82a:33013**
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- Sharma, Bhagirath Lal New generating functions for the Gegenbauer and the Hermite polynomials. **82g:33031**
- Singh, O. P. (with Pandey, Ram Nakshatra) Some properties and expansions of the polynomial set $\{M_{n,p}(x,y)\}$. (Turkish summary) **82d:33022**
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- Singh, Surya Narain See Rai, P. N. **82i:33020**; Srivastava, A. N. **82i:33021** and Hussain, M. A. **82m:33008**
- Singh Chandel, R. C. (with Bhargava, S. K.) A generalization of certain classes of polynomials. **82h:33016**
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- Srivastava, Hari M. Some generating functions for Laguerre and Bessel polynomials. **82g:33033**
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- Stanton, Dennis Three addition theorems for some q -Krawtchouk polynomials. **82g:33035**
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- Trutt, David See de Branges, Louis. **82j:33018**
- Varga, R. S. See de Bruin, M. G.; et al. **82c:33018**
- Wilson, James A. Some hypergeometric orthogonal polynomials. **82a:33014**
- Yadav, Sarfoo Prasad On the absolute convergence of Jacobi series at end points. **82j:33021**
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- Ablovitz, Mark J. (with Airault, Hélène) Perturbations finies et forme particulière de certaines solutions de l'équation de Korteweg-de Vries. (English summary) **(82h:35134)**
- Agarwal, A. K. A theorem on the zeros of certain classical polynomials. **(82d:33014)**
- Ahmed, Shafique Equilibrium configurations of some one-dimensional systems. **(82m:70016)**
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- Askey, Richard A. (with Ismail, Mourad E. H.) The Rogers q -ultraspherical polynomials. **(82d:42026)**
- Bannai, Eiichi Orthogonal polynomials, algebraic combinatorics and spherical t -designs. **(82c:05048)**
- Barndorff-Nielsen, Ole (with Pedersen, Bo V.) The bivariate Hermite polynomials up to order six. **(82f:62088)**
- Bressoud, David M. Linearization and related formulas for q -ultraspherical polynomials. **(82c:33013)**
- Dwivedi, A. P. (with Singh, V. B.) Dual sequence equations involving Jacobi and Laguerre polynomials. **(82m:45010)**
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- Getu, Seyoum (with Shapiro, Louis W.) Combinatorial view of the composition of functions. **(82d:05011)**
- Glaeske, Hans-Jürgen Die Laguerre-Pinney-Transformation. **(82g:44004)**
- Glasser, M. L. Laplace transforms and asymptotic expansions of orthogonal polynomials. **(82g:44008)**
- Guha, Bandana Expansion of incomplete gamma function in terms of Jacobi polynomials. **(82i:33002)**
- Gupta, P. M. See Dwivedi, A. P. **(82c:45009)**
- Guttman, Irwin See Tan, W. Y. **(82i:62080)**
- Hano, Jun-ichi A transformation formula of a generalized theta series. **(82a:14017)**
- Hayashi, H. See Prasad, Jagdish. **(82c:42023)**
- Ismail, Mourad E. H. See Askey, Richard A. **(82h:42026)**
- Jain, V. K. q -analogues of some bilinear transformations. **(82j:05014)**
- Jaju, R. P. See Tivari, B. M. L. **(82c:44004)**
- Jerri, A. J. The application of general discrete transforms to computing orthogonal series and solving boundary value problems. **(82a:41008)**
- Joshi, C. M. (with Prajapat, M. L.) The operator $T_{p,q}$ and characterization of a class of polynomials by the generalized Rodrigues' formula. **(82j:33005)**
- Khanna, I. K. Asymptotic behaviour and n th differential formulae for the polynomial set $B_j(x,y)$. **(82h:33003)**
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- Kirschenhofer, Peter Binomialfolgen, Shefferfolgen und Faktorfolgen in der q -Analysis. **(82d:05013)**
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- Pospelov, A. S. Orthonormal systems generated by representations of a class of compact groups. (Russian) **(82e:22011)**
- Prabhakar, T. R. Some singular integral equations involving Laguerre polynomials and finite parts of divergent integrals. **(82h:45011)**
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- Prakash, M. See Shlomo, S. **(82d:81041)**
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- Shah, Manilal On some results involving H -functions. (82g:33016)
- Shapiro, Louis W. A combinatorial proof of a Chebyshev polynomial identity. (82i:05017)
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- Shlomo, S. (with Prakash, M.) Phase space distribution of an N -dimensional harmonic oscillator. (82d:81041)
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- Srivastava, Hari M. Certain dual series equations involving Jacobi polynomials. (Italian summary) (82j:45009)
- (with Pathan, M. A.) Some bilateral generating functions for extended Jacobi polynomials. II. (82g:33009)
- Tan, W. Y. (with Guttman, Irwin) On the construction of multidimensional orthogonal polynomials. (82i:62080)
- Ting, Bing Yuan (with Luke, Yudell L.) Conversion of polynomials between different polynomial bases. (82f:65018)
- Tivari, B. M. L. (with Jaju, R. P.) On the inversion operator function of a generalised convolution transform involving Hermite polynomial in its kernel. (82c:44004)
- Tyc, Zygmunt See Sadlok, Zbigniew, (82i:46058)
- Vasil'ev, N. I. (with Klokova, J.) The use of Čebyšev polynomials for calculation of integrals. (Russian) (82c:65012)
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- Agrawal, B. D. (with Chaubey, J. P.) Operational derivation of generating relations for generalized polynomials. 82g:33036
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- Akimaru, Haruo (with Takahashi, Haruhisa) Asymptotic expansion for Erlang loss function and its derivative. 82g:33037
- Bruschi, Massimo (with Ricci, Paolo Emilio) Lucas and Čebyšev polynomials in several variables. (Italian. English summary) 82k:33024
- Carlitz, L. Some remarks on the Eulerian function. 82e:33013
- Chaubey, J. P. See Agrawal, B. D., 82g:33036
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- Keats, R. G. A note on: *Dilogarithms and associated functions* [MacDonald, London, 1958; MR 21 #4264] by L. Lewin. 82b:33020a
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- Singh Chandel, R. C. A further note on the class of polynomials $T_n^{a,k}(x, r, p)$. 82i:33018
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- Werner, Udo (with Pietzsch, Wolfgang) Die Polynome $S_n(x)$ zur Darstellung der Energiespektralfunktionen idealer Turbulenzfelder. 82f:33009
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- Integral representation of functional sequences determined by generating functions. (Russian) 82j:33022
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- Abou-Tair, Ibrahim Alyan Youcif ★Eine spezielle Dirichletreihe. (German) [A special Dirichlet series] (82i:10051)
- Adepoju, J. A. See Nassif, M., (82j:05015)
- Agrawal, B. D. (with Chaubey, J. P.) Bilateral generating relations for a function defined by generalized Rodrigues formula. (82i:05004)
- Chatterjee, S. K. Some multilateral generating functions. (82k:33020)
- Chaubey, J. P. See Agrawal, B. D., (82i:05004)
- Doman, B. G. S. (with Williams, J. K.) Fibonacci and Lucas polynomials. (82k:10013)
- Džrbašjan, Mk. M. (with Saakjan, B. A.) Expansions in series of generalized absolutely monotone functions. (Russian. English summary) (82k:41024)
- Fettis, Henry E. On some trigonometric integrals. (82c:33003a)
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- Jain, Sudha See Prabhakar, T. R., (82b:45015)
- Kreweras, G. The number of more or less "regular" permutations. (82c:05011)

- Monk, Daniel S. The q -gamma function for $x < 0$. (82j:33001)
- Nassif, M. (with Adepoju, J. A.) A polynomial set related to Gončarov polynomials. (82j:05015)
- Niederhausen, Heinrich Sheffer polynomials in path enumeration. (82d:05015)
- Pathak, R. S. Erratum: "Dual series equations involving heat polynomials" [Nederl. Akad. Wetensch. Indag. Math. 41 (1979), no. 4, 455-463; MR 80k:45008]. (82a:45014)
- Prabhakar, T. R. (with Jain, Sudha) Generalized Bessel function and some integral equations. (82b:45015)
- Rawlings, Don Generalized Worpitzky identities with applications to permutation enumeration. (82d:05021)
- Rozenbljum, A. V. (with Rozenbljum, L. V.) Representations of the group of motions of n -dimensional Euclidean space and Bessel functions of matrix index. (Russian. English summary) (82b:22029)
- Rozenbljum, L. V. See Rozenbljum, A. V., (82b:22029)
- Saakjan, B. A. See Džrbašjan, Mk. M., (82k:41024)
- Sobolev, S. L. On extreme roots of Euler polynomials. (Russian) (82c:41049)
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- Stanton, Dennis Some q -Krawtchouk polynomials on Chevalley groups. 82a:33015
- secondary classifications:
- Aldrovandi, R. (with Monte Lima, I.) A matricial approach to cluster expansions. (82b:82002)
- Chow, T. L. Evaluation of radiative matrix elements for the harmonic oscillator. (82c:81010)
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- Dieudonné, Jean A. Special functions and linear representations of Lie groups. (82e:22030)
- Dubovik, O. A. (with Sidonskii, O. B.) A group of matrices and Legendre kernels. (Russian) (82i:22010)
- Representation of a group of conformal motions of Euclidean space and Legendre functions on the cut. (Russian) (82i:22016)
- Dunkl, Charles F. Cube group invariant spherical harmonics and Krawtchouk polynomials. (82i:22011)
- Godunov, S. K. ★Коэффициенты Клебша-Гордана и специальные функции для решения инвариантных уравнений. (Russian) [Clebsch-Gordan coefficients and special functions for the solution of invariant equations] (82f:22017)
- Goodman, Sharon Symmetry properties of the zero sets of nil-theta functions. (82h:22007)
- Kara, Mikko (with Kurki Suonio, Kaarle) Symmetrized multipole analysis of orientational distributions. (82e:82017)
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- Kurki Suonio, Kaarle See Kara, Mikko, (82e:82017)
- Lacquinod, Jean-Claude Représentations tensorielles du groupe $SO(N)$ et applications. (English summary) (82f:22018)
- Monte Lima, I. See Aldrovandi, R., (82b:82002)
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- Weinert, Ulrich Spherical tensor representation. (82f:22019)

33A99 Miscellaneous topics

- Agrawal, B. M. (with Kumar, Virendra) An application of q -Saalschutz theorem. 82m:33011
- Agrawal, Hukum Chand On a unified class of polynomials. 82f:33010
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- Berndt, Bruce C. (with Joshi, Padmini T.; Wilson, B. M.) Chapter 2 of Ramanujan's second notebook. (82h:01038)
- Cohen, M. E. (with Sun, Hugo S.) Further generalizations of the Brock-Carlitz identity. (82m:05009)
- Joshi, Padmini T. See Berndt, Bruce C.; et al., (82h:01038)
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- Krasnov, M. L. (with Kiselev, A. I.; Makarenko, G. I.) ★A book of problems in ordinary differential equations. 82g:34001
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- Burghes, David N. (with Borrie, Morag S.) ★Modelling with differential equations. (82k:00024)
- Kapur, J. N. (with Khan, Q. J. A.) Difference equation models in ecology and epidemiology. (82b:92035)
- Khan, Q. J. A. See Kapur, J. N., (82b:92035)
- de Mello, Alcides A. H. (with Barone, Mário, Jr.) ★Equações diferenciais. Uma introdução aos sistemas dinâmicos. (Portuguese) [Differential equations. An introduction to dynamical systems] (82a:58001)
- Orlov, Konstantin Common general practical method for solving ordinary and partial differential equations. (82d:35002)

34-02 Advanced exposition (research surveys, monographs, etc.)

- (Burns, John A.) See Reid, William T., 82f:34002
- Golokvosius, P. Ordinary differential equations and differential operators. (Russian. Lithuanian and English summaries) 82b:34001
- Hale, Jack K. ★Ordinary differential equations. 82c:34001
- Reid, William T. ★Sturmian theory for ordinary differential equations. 82f:34002

secondary classifications:

- Cronin-Scanlon, Jane ★Mathematics of cell electrophysiology. (82b:92012)
- Guckenheimer, John Dynamics of the van der Pol equation. (82d:58036)
- Hawes, Fred A. Some old and new results on singularly perturbed boundary value problems. (82c:34066)
- Jurkat, W. B. ★Meromorphe Differentialgleichungen. (German) [Meromorphic differential equations] (82a:34004)
- Kahala, V. Function theory. (Russian. Lithuanian and English summaries) (82b:01031)

34-03 Historical (must also be assigned at least one classification number from Section 01)

- Kečkić, Jovan D. Pompeiu's work on differential equations with some generalisations. 82j:34003

secondary classifications:

- Bennett, Stuart ★A history of control engineering, 1800-1930. (82j:01045)
- Bertolino, Milorad Differential and integral equations in Yugoslavia. (Russian) (82i:01035)
- (Bogolubov, N. N.) See Vladimirov, V. S.; et al., (82f:01152) and Lučka, T. F., (82g:01062)
- Conti, Roberto Giovanni Sansone. (Italian) (82b:01039)
- Ergin, N. P. See Vladimirov, V. S.; et al., (82f:01152)
- Gürel, Okan Preface. (82c:01035)
- Poincaré's bifurcation analysis. (82j:01046)
- (Krylov, N. M.) See Mitropol'skii, Ju. A., (82f:01124) and Lučka, T. F., (82g:01062)
- Lučka, T. F. The contribution of N. M. Krylov and N. N. Bogolubov to the development of variational methods in mathematical physics. (Russian) (82g:01062)
- Mikeladze, Š. E. ★Избранные труды. Том II. (Russian) [Selected works. Vol. II] (82i:01072b)
- Mitropol'skii, Ju. A. Nikolai Mitrofanovič Krylov (on the occasion of the 100th anniversary of his birth). (Russian) (82f:01124)
- See also Vladimirov, V. S.; et al., (82f:01152) and Studies of Ju. A. Mitropol'skii on the theory of nonlinear oscillations and nonlinear differential equations. (82f:01175)
- Parasjuk, O. S. See Vladimirov, V. S.; et al., (82f:01152)
- (Sansone, Giovanni) See Conti, Roberto, (82b:01039)
- Vladimirov, V. S. (with Ergin, N. P.; Mitropol'skii, Ju. A.; Parasjuk, O. S.) Nikolai Nikolaevič Bogolubov (on the occasion of his 70th birthday). (Russian) (82f:01152)
- Anniversary:
- Birth of Krylov, N. M. See Mitropol'skii, Ju. A., (82f:01124)
- Bibliography:
- Sansone, Giovanni See Conti, Roberto, (82b:01039)
- Biography:
- Bogolubov, N. N. See Vladimirov, V. S.; et al., (82f:01152)
- Krylov, N. M. See Mitropol'skii, Ju. A., (82f:01124)

Birthday:

- Bogolubov, N. N. See Vladimirov, V. S.; et al., (82f:01152)

Obituary:

- Sansone, Giovanni See Conti, Roberto, (82b:01039)

- Studies of Ju. A. Mitropol'skii on the theory of nonlinear oscillations and nonlinear differential equations The studies of Ju. A. Mitropol'skii in the field of the theory of nonlinear oscillations and the theory of nonlinear differential equations. (Russian) (82f:01175)

34-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Sharp, Nigel A. Comparison of numerical methods for the integration of the black hole geodesic equations. (82e:83002)
- Zabusky, Norman J. Computational synergetics and mathematical innovation. (82m:00029)

34-06 Proceedings, conferences, etc.

- (Bicadze, A. V.) See Proceedings: Vekua, I. N. Institute of Applied Mathematics, 82c:34004
- (Conti, Roberto) See Recent advances in differential equations, 82m:34003
- (Everitt, W. N.) See Ordinary and partial differential equations, 82c:34003 and Ordinary and partial differential equations, 82c:34004
- (Kappel, F.) See Abstract Cauchy problems and functional differential equations, 82d:34001
- (Knowles, Ian W.) See Spectral theory of differential operators, 82c:34002
- (Lewis, Roger T.) See Spectral theory of differential operators, 82c:34002
- (Lukovskii, I. A.) See Dynamics and stability of mechanical systems, 82c:34003
- (Mitropol'skii, Ju. A.) See Analytic methods for investigating nonlinear oscillations, 82c:34002
- (de Mottoni, Piero) See Nonlinear differential equations, 82d:34003
- (Radzabov, N. R.) See Differential and integral equations, 82m:34002
- (Salvadori, Luigi) See Nonlinear differential equations, 82c:34003
- (Schappacher, Wilhelm) See Abstract Cauchy problems and functional differential equations, 82d:34001
- (Sibirskii, K. S.) See All-Union Conference: Qualitative Theory of Differential Equations, 82d:34002
- (Sleeman, B. D.) See Ordinary and partial differential equations, 82c:34004
- (Vokresenskii, E. V.) See Some questions of the qualitative theory of differential equations and the theory of the control of motion, 82m:34004
- (Zanbybaev, B. S.) See Qualitative theory of differential equations, 82f:34003
- Abstract Cauchy problems and functional differential equations ★Abstract Cauchy problems and functional differential equations. 82d:34001
- All-Union Conference:
- Qualitative Theory of Differential Equations ★V Всесоюзная Конференция по Качественной Теории Дифференциальных Уравнений. (Russian) [Fifth All-Union Conference on Qualitative Theory of Differential Equations] 82d:34002
- Analytic methods for investigating nonlinear oscillations ★Аналитические методы исследования нелинейных колебаний. (Russian) [Analytic methods for investigating nonlinear oscillations] 82c:34002
- Bifurcation ★Nonlinear differential equations. 82d:34003
- Birmingham, Ala. ★Spectral theory of differential operators. 82c:34002
- Conference:
- Nonlinear Differential Equations ★Nonlinear differential equations. 82d:34003
- Ordinary and Partial Differential Equations ★Ordinary and partial differential equations. 82c:34003
- ★Ordinary and partial differential equations. 82c:34004
- Recent Advances in Differential Equations ★Recent advances in differential equations. 82m:34003
- Spectral Theory of Differential Operators ★Spectral theory of differential operators. 82c:34002
- Differential equations ★V Всесоюзная Конференция по Качественной Теории Дифференциальных Уравнений. (Russian) [Fifth All-Union Conference on Qualitative Theory of Differential Equations] 82d:34002
- ★Качественная теория дифференциальных уравнений. (Russian) [Qualitative theory of differential equations] 82f:34003
- ★Ordinary and partial differential equations. 82c:34004
- Differential and integral equations ★Дифференциальные и интегральные уравнения. Вып. 3. (Russian) [Differential and integral equations. No. 3] 82m:34002
- Dundee ★Ordinary and partial differential equations. 82c:34003
- ★Ordinary and partial differential equations. 82c:34004
- Dynamics and stability of mechanical systems ★Динамика и устойчивость механических систем. (Russian) [Dynamics and stability of mechanical systems] 82c:34003
- Functional-differential equations ★Functional-differential equations. (Japanese) 82c:34001
- ★Abstract Cauchy problems and functional differential equations. 82d:34001
- Invariance ★Nonlinear differential equations. 82d:34003
- Leibnitz ★Abstract Cauchy problems and functional differential equations. 82d:34001
- Mechanical systems ★Динамика и устойчивость механических систем. (Russian) [Dynamics and stability of mechanical systems] 82c:34003
- Nonlinear differential equations ★Nonlinear differential equations. 82d:34003
- Ordinary differential equations ★Труды Института Прикладной Математики Имени И. Н. Веква. 8. (Russian) [Proceedings of the I. N. Vekua Institute of Applied Mathematics. 8] 82c:34004
- Ordinary and partial differential equations ★Ordinary and partial differential equations. 82c:34003

★Ordinary and partial differential equations. 82c:34004

Partial differential equations ★Ordinary and partial differential equations. 82c:34003
Proceedings:

Vekua, I. N. Institute of Applied Mathematics ★Труды Института Прикладной Математики Имени И. Н. Векюа. 8. (Russian) [Proceedings of the I. N. Vekua Institute of Applied Mathematics. 8] 82c:34004

Qualitative theory of differential equations ★Качественная теория дифференциальных уравнений. (Russian) [Qualitative theory of differential equations] 82f:34003

Qualitative theory of solutions in functional-differential equations ★Qualitative theory of solutions in functional-differential equations. 82k:34001

Recent advances in differential equations ★Recent advances in differential equations. 82m:34003

Some questions of the qualitative theory of differential equations and the theory of the control of motion ★Некоторые вопросы качественной теории дифференциальных уравнений и теории управления движением. (Russian) [Some questions of the qualitative theory of differential equations and the theory of the control of motion] 82m:34004

Spectral theory of differential operators ★Spectral theory of differential operators. 82k:34002

Stability ★Nonlinear differential equations. 82d:34003

Symposium:

Functional-Differential Equations ★Functional-differential equations. (Japanese) 82a:34001

Qualitative Theory of Solutions in Functional-Differential Equations ★Qualitative theory of solutions in functional-differential equations. 82k:34001

Trento ★Nonlinear differential equations. 82d:34003

Trieste ★Recent advances in differential equations. 82m:34003

Workshop:

Functional Differential Equations and Nonlinear Semigroups ★Abstract Cauchy problems and functional differential equations. 82d:34001

secondary classifications:

(Busenberg, Stavros N.) See Differential equations and applications in ecology, epidemics, and population problems. (82m:92003)

(Cooke, Kenneth L.) See Differential equations and applications in ecology, epidemics, and population problems. (82m:92003)

(Emel'janov, K. V.) See Differential equations with a small parameter. (82d:35008)

(Gor'kov, Ju. P.) See Differential equations with a small parameter. (82d:35008)

(Herdman, Terry L.) See Integral and functional differential equations. (82d:45001)

(Hoppensteadt, Frank C.) See Mathematical aspects of physiology. (82f:92003)

(Makarov, I. P.) See Partial differential equations. (82c:35004)

(Rankin, Samuel M., III) See Integral and functional differential equations. (82d:45001)

(Stech, Harlan W.) See Integral and functional differential equations. (82d:45001)

Claremont, Calif. ★Differential equations and applications in ecology, epidemics, and population problems. (82m:92003)

Conference:

Differential Equations and Applications in Ecology, Epidemics, and Population

Problems ★Differential equations and applications in ecology, epidemics, and population problems. (82m:92003)

Integral and Functional Differential Equations ★Integral and functional differential equations. (82d:45001)

Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)

Differential equations ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)

Differential equations and applications in ecology, epidemics, and population problems ★Differential equations and applications in ecology, epidemics, and population problems. (82m:92003)

Differential equations with a small parameter ★Дифференциальные уравнения с малым параметром. (Russian) [Differential equations with a small parameter] (82d:35008)

Function theory ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)

Functional-differential equations ★Integral and functional differential equations. (82d:45001)

Integral and functional differential equations ★Integral and functional differential equations. (82d:45001)

Mathematical aspects of physiology ★Mathematical aspects of physiology. (82f:92003)

Morgantown, W.Va. ★Integral and functional differential equations. (82d:45001)

Partial differential equations ★Дифференциальные уравнения (в частных производных). (Russian) [Partial differential equations] (82c:35004)

Physiology ★Mathematical aspects of physiology. (82f:92003)

Salt Lake City, Utah ★Mathematical aspects of physiology. (82f:92003)

Summer Seminar:

Applied Mathematics ★Mathematical aspects of physiology. (82f:92003)

Symposium:

Deformation Theory of Linear Differential Equations and a New Viewpoint for Extension of Abelian Function Theory ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)

34Axx General theory

secondary classifications:

Kurpel', M. S. (with Šušar, B. A.) ★Двусторонние операторные неравенства и их приложения. (Russian) [Two-sided operator inequalities and their applications] (82j:47002)

Šušar, B. A. See Kurpel', M. S., (82j:47002)

34A05 Solutions in closed form, integration by quadratures, reduction of differential equations

Anderson, Robert Leonard (with Harnad, John; Winternitz, P.) Group theoretical approach to superposition rules for systems of Riccati equations. 82k:34003

Berkovitch, L. M. Method of exact linearization of nonlinear autonomous differential equations of second order. 82b:34001

Gorbuzov, V. N. On the question of integrability in quadratures. (Russian. English summary) 82j:34003

Hačatrian, I. G. On the existence of a transformation operator for high-order differential equations which preserves the asymptotic behavior of the solutions. (Russian. Armenian and English summaries) 82a:34002

Harnad, John See Anderson, Robert Leonard; et al., 82k:34003

Hochstadt, Harry On the explicit solution of a special Hill's equation. 82g:34002

Hohenstein, R. M. See Pan, H. H., 82d:34004

Iwano, Masahiro On general solution of a first-order nonlinear differential equation of the form $x(dy/dx) = y(\lambda + f(x, y))$ with negative rational λ . 82g:34003

Kard, P. A method of solving one-dimensional wave equations. (Russian. Estonian and English summaries) 82j:34004

Kečević, Jovan D. Applications of functional equations to differential equations.

(Serbo-Croatian summary) 82g:34004

Kocić, Vlatko I. J. Conditions for the integrability of a second order nonlinear differential equation. 82g:34005

On Emden's differential equation and some related equations. (Serbo-Croatian summary) 82h:34002

Lazov, Petar R. On results of R. M. Garde. (Macedonian. Russian summary) 82b:34002

Li, Hong Xiang Some new types of integrable ordinary differential equations. (Chinese) 82k:34004

Pan, H. H. (with Hohenstein, R. M.) A method of solution for an ordinary differential equation containing symbolic functions. 82d:34004

Winternitz, P. See Anderson, Robert Leonard; et al., 82k:34003

secondary classifications:

Adomian, George (with Sarafyan, D.) Numerical solution of differential equations in the deterministic limit of stochastic theory. (82e:60092)

Bertolino, Milorad Structure de l'intégrale générale des équations différentielles. (82m:34047)

Bondarenko, B. A. Quasihyperbolic and quasitrigonometric functions and their applications to integration of differential equations. (Russian) (82k:33002)

Elfinger, H. J. On certain nonlinear equations arising in self-consistent theories. (Italian and Russian summaries) (82c:34022)

Grigorenko, N. V. A criterion for solvability in quadratures and the direct problem of Galois theory for linear differential equations. (Russian) (82j:12030)

Kimura, Toshihisa (with Matuda, Tizuko) On systems of differential equations of order two with fixed branch points. (82c:34010)

Lorenz, Dieter (with Zimmermann, R. E.) A note on a second-order differential equation with infinitely many solutions. (82k:83009)

Martynov, I. P. A property of simplified n -th-order differential equations. (Russian. English summary) (82f:34009)

Matuda, Tizuko See Kimura, Toshihisa, (82c:34010)

Sarafyan, D. See Adomian, George, (82e:60092)

Starč, Zdravko F. Linearization of a nonlinear functional-differential equation. (82a:34082)

Zimmermann, R. E. See Lorenz, Dieter, (82k:83009)

34A08 Equations not solved with respect to the highest-order derivative, singular solutions

secondary classifications:

Feščenko, T. S. See Romanenko, O. Ju., (82m:34068)

Romanenko, O. Ju. (with Feščenko, T. S.) The asymptotic behavior of solutions of functional-differential equations of neutral type in the neighborhood of a critical point. (Russian) (82m:34068)

34A10 Initial value problems: general existence and uniqueness theorems; continuous dependence of solutions on parameters, initial conditions and boundary conditions [See also 45D05.]

Abdel Karim, Rahmi Ibrahim Ibrahim Fundamental properties of the solutions of quasilinear differential equations of the fifth order. 82b:34003

Banaś, Józef (with Hajnosz, Andrzej; Wędrychowicz, Stanisław) Relations among various criteria of uniqueness for ordinary differential equations. 82e:34005

Dimitrovski, Dragan S. (with Lazarevska, Liljana) An elementary treatment of chemical differential equations. (Macedonian. French summary) 82b:34003

Driver, R. D. See Norris, Michael J., 82f:34004

Filippov, V. V. On the existence of solutions of differential equations. 82c:34005

Gegel', É. I. Integration of a system of differential equations by the indeterminate multiplier method. (Russian) 82c:34006

Grammatikopoulos, Myron K. (with Kulenović, Mustafa) On the nonexistence of L^2 -solutions of n th order differential equations. 82h:34004

Hajnosz, Andrzej See Banaś, Józef; et al., 82e:34005

Hamedani, G. G. A global existence and uniqueness theorem for ordinary differential equations. 82c:34006

Kiguradze, I. T. (with Rachunková, Irena) On a certain nonlinear problem for two-dimensional differential systems. 82c:34007

Kulenović, Mustafa See Grammatikopoulos, Myron K., 82h:34004

Lazarevska, Liljana See Dimitrovski, Dragan S., 82b:34003

Milošević, Radiroje On an iterative procedure for the solution of differential equations.

- (Serbo-Croatian. English summary) **82c:34005**
 On an application of the Čaplygin theorem to the solution of first- and second-order ordinary differential equations. (Serbo-Croatian. English summary) **82j:34005**
- Minařiková, Květa Some comments on the differential equation $x''' + ax'' + bx' + h(x) = e(t)$. (Czech. Russian and English summaries) **82c:34008**
- Norris, Michael J. (with Driver, R. D.) A uniqueness theorem for ordinary differential equations. **82f:34004**
- Pandit, S. G. Systems described by differential equations containing impulses: existence and uniqueness. **82j:34006**
- Rachůnková, Irena On a Kneser problem for a system of nonlinear ordinary differential equations. **82d:34005**
See also Kiguradze, I. T., **82c:34007**
- Skrapiuk, V. P. Degenerating parameter and degenerate equations. (Russian. Lithuanian and English summaries) **82b:34004**
- Vorel, Zdeněk Continuous dependence on parameters. **82c:34005**
- Wędrychowicz, Stanisław *See* Banaś, Józef; et al., **82c:34005**
- secondary classifications:
- Ansorge, Rainer Approximation of set-valued operators by sequences of set-valued collectively compact operators. **(82d:34017)**
- Banerjee, A. (with Som, M. M.) Einstein cluster of charged particles. **(82g:83018)**
- Fujii, Masatomo Some properties of continuous approximate solutions by discrete variable methods. **(82f:65077)**
- Grudo, È. I. (with Jančuk, L. F.) On the general theory of Pfaffian systems. (Russian) **(82c:58006)**
- Haji, Ibrahim N. (with Skelboe, Stig) Steady-state analysis of piecewise-linear dynamic systems. **(82f:94018)**
- Jančuk, L. F. *See* Grudo, È. I., **(82c:58006)**
- Landau, Mayer (with Valentini, Françoise A.) Construction, mathematical study and numerical simulation of a calcium turnover model during skeletal muscle contraction. **(82m:92030)**
- Orlov, Konstantin Cases when the use of the analytic method for solving differential equations is better than the use of numerical ones. **(82c:65044)**
- Piccinini, Livio C. Remarks on a uniqueness problem for dynamical systems. (Italian summary) **(82f:34052)**
- Prival'skii, V. B. The Cauchy problem for systems with the simplest hysteresis nonlinearities. (Russian) **(82k:34075)**
- Raghavendra, V. A remark on an integral inequality. **(82g:26023)**
- Rzepecki, Bogdan Fixed point theorem of Luxemburg type with application to differential equations. (Italian summary) **(82c:54080)**
- Schecter, Eric One-sided continuous dependence of maximal solutions. **(82c:45002)**
- Skelboe, Stig *See* Haji, Ibrahim N., **(82f:94018)**
- Som, M. M. *See* Banerjee, A., **(82g:83018)**
- Valentini, Françoise A. *See* Landau, Mayer, **(82m:92030)**
- Villa, L. T. A note on behavior of solutions of consolidation equations in soil mechanics. **(82c:73082)**
- Zubov, V. I. The problem of the existence of an electromagnetic field causing given motions of charged particles. (Russian) **(82b:78011)**
- 34A15 Initial value problems: continuation of solutions
- Ishii, Hiroyuki Prolongation of solutions of nonlinear ordinary differential equations. **82c:34006**
- 34A20 Differential equations in the complex domain [See also 30D05.]
- Balser, Werner Zum Einzigkeitssatz in der Invariantentheorie meromorpher Differentialgleichungen. **82d:34006**
- Bank, Steven B. (with Kaufman, Robert P.) On Briot-Bouquet differential equations and a question of Einar Hille. **82g:34006**
 (with Laine, Ilpo) On the oscillation theory of $f'' + Af = 0$ where A is entire. **82m:34005**
- Bureau, F. J. Sur un système d'équations différentielles non linéaires. **82c:34007**
- Daniiljuk, V. I. (with Sibirskii, K. S.) Szygizy between centroaffine invariants of a quadratic differential system. (Russian) **82f:34005**
- Dokov, M. V. Quasiconformal integrals. (Russian) **82c:34004**
- Dörfler, Peter Über Normalformen formaler autonomer Differentialsysteme mit quadratischen Anfangstermen. **82f:34006**
- Ergin, N. P. The equations $w'' = f(w', w, z)$ with an irrational right hand side. (Russian) **82m:34006**
- van den Essen, Arno Reduction of singularities of the differential equation $Ady = Bdx$. **82m:34007**
- Gackstatter, Fritz (with Laine, Ilpo) Zur Theorie der gewöhnlichen Differentialgleichungen im Komplexen. **82g:34007**
- Gérard, R. (with Sibuya, Yasutaka) Étude de certains systèmes de Pfaff avec singularités. **82m:34008a**
See also Ramis, Jean-Pierre, **82m:34008b**
- Hille, Einar Differential operators of infinite order. **82a:34003**
- Iľjasenko, Ju. S. Divergence of series that reduce an analytic differential equation to linear normal form at a singular point. (Russian) **82d:34007**
- Iwano, Masahiro On a general solution of a nonlinear 2-system of the form $x'' dw/dx = \Lambda w + xh(x, w)$ with a constant diagonal matrix Λ of signature (1, 1). **82d:34008**
- Jablonskii, A. I. *See* Semjakina, T. K., **82c:34009**
- Jurkat, W. B. ★Meromorphe Differentialgleichungen. (German) [Meromorphic differential equations] **82a:34004**
- Kaufman, Robert P. *See* Bank, Steven B., **82g:34006**
- Kawahata, Yuriko The global problem of an n th order Fuchsian differential equation with 3 regular singular points. (Japanese) **82c:34009**
- Kondratenja, S. G. On the solution of a Painlevé problem. (Russian) **82c:34010**
- Laine, Ilpo *See* Gackstatter, Fritz, **82g:34007** and Bank, Steven B., **82m:34005**
- Mohon'ko, A. Z. Application of a result of Clunie and Hayman to first-order differential equations. (Russian) **82k:34007**
- Okamoto, Kazuo On the τ -function of the Painlevé equations. **82c:34005**
- Petrenko, V. P. Regularity of growth of algebroid solutions of algebraic differential equations. (Russian) **82c:34008**
 On the growth of meromorphic solutions of algebraic differential equations. (Russian) **82k:34006**
- Pisarenok, V. P. The behavior of solutions of a class of first-order differential equations in the complex plane. (Russian) **82h:34007**
- Powder, Charles An existence theorem for solutions of n th order nonlinear differential equations in the complex domain. **82k:34008**
- Ramis, Jean-Pierre À propos du théorème de Borel-Ritt à plusieurs variables. **82m:34008b**
- Rodriguez Montes, Jaime Some regularity properties of complex differential equations. (Spanish. English summary) **82j:34007**
- Schäffke, Reinhard (with Schmidt, Dieter) Connection problems for linear ordinary differential equations in the complex domain. **82c:34009**
 (with Schmidt, Dieter) The connection problem for general linear ordinary differential equations at two regular singular points with applications in the theory of special functions. **82a:34010a**
 The connection problem for two neighboring regular singular points of general linear complex ordinary differential equations. **82a:34010b**
- Schlosser-Haupt, Silke (with Wyrwich, Herbert) Über die Stokes-Multiplikatoren gewisser linearer Differentialgleichungen n -ter Ordnung. **82d:34009**
- Schmidt, Dieter *See* Schäffke, Reinhard, **82a:34010a** and **82c:34009**
- Segur, Harvey Ordinary differential equations of Painlevé-type and the inverse scattering transform. (See **82h:81117**)
- Semjakina, T. K. (with Jablonskii, A. I.) On the absence of nonholomorphic solutions in the neighborhood of a fixed singular point of some classes of systems of two equations. (Russian) **82c:34009**
- Sibirskii, K. S. *See* Daniiljuk, V. I., **82f:34005**
- Sibuya, Yasutaka *See* Gérard, R., **82m:34008a** and Ramis, Jean-Pierre, **82m:34008b**
- Steinmetz, Norbert Über das Anwachsen der Lösungen homogener algebraischer Differentialgleichungen zweiter Ordnung. (English summary) **82d:34010**
- Strelitz, Shlomo A remark on the growth of solutions of first order algebraic differential equations. **82a:34005**
 On meromorphic solutions of algebraic differential equations. **82a:34006**
- Wyrwich, Herbert *See* Schlosser-Haupt, Silke, **82d:34009**
- secondary classifications:
- Airault, Hélène Addition and correction to: "Rational solutions of Painlevé equations" [Stud. Appl. Math. **61** (1979), no. 1, 31–53; MR **80e:58005**]. **(82m:58031)**
- Bank, Steven B. On certain canonical products which cannot satisfy algebraic differential equations. **(82g:30044)**
 Some results on hypertranscendental meromorphic functions. **(82b:30030)**
- Belair, Jacques Sur une équation différentielle fonctionnelle analytique. **(82c:34071)**
- Epifanov, O. V. A differential operator with polynomial coefficients in classes of entire functions with a given estimator of the indicator. (Russian) **(82c:34013)**
- (Ergin, N. P.) *See* Stokalo, Ĭ. Z., **(82a:01047)**
- van den Essen, Arno Regular singularities along normal crossings. **(82a:14004)**
- Fricke, Gerd H. (with Roy, Ranjan; Shah, Shantilal M.) Bounded index, entire solutions of ordinary differential equations and summability methods. **(82c:30040)**
- Golubeva, V. A. Reconstruction of a Pfaff system of Fuchs type from the generators of the monodromy group. (Russian) **(82h:14008)**
- Hačatrian, I. G. On unique reconstruction of a differential operator with analytic coefficients from its spectral matrix-function. (Russian. Armenian summary) **(82g:34024)**
- Hoang Le Min' The de Rham cohomology of a weakly irregular differential system. (Russian) **(82e:14031)**
- Iwano, Masahiro On general solution of a first-order nonlinear differential equation of the form $x(dy/dx) = y(\lambda + f(x, y))$ with negative rational λ . **(82g:34003)**
- Ljubars'kii, G. Ja. On the theory of WKB-approximation. (Russian. English summary) **(82b:34077)**
- Lutz, Donald A. Connection problems in the parameterless case: progress and more problems. **(82d:34071)**
- Oishi, Shin'ichi Bilinearization of the Painlevé equations. **(82c:35072)**
- Olver, Frank W. J. The general connection-formula problem for linear differential equations of the second order. **(82f:34069)**
- Polniakowski, Z. On some ordinary differential equations. **(82m:34033)**
- Roy, Ranjan *See* Fricke, Gerd H.; et al., **(82i:30040)**
- Schäffke, Reinhard (with Schmidt, Dieter) The connection problem for general linear ordinary differential equations at two regular singular points with applications in the theory of special functions. **(82a:34010a)**
- Schmidt, Dieter *See* Schäffke, Reinhard, **(82a:34010a)**
- Shah, Shantilal M. *See* Fricke, Gerd H.; et al., **(82i:30040)**
- Sibuya, Yasutaka A theorem concerning uniform simplification at a transition point and the problem of resonance. **(82m:34060)**
- Smiljanskii, V. R. Some properties of Stokes multipliers. I. (Russian) **(82f:34067)**
- Steinmetz, Norbert Über die Nullstellen von Differentialpolynomen. **(82g:30053)**
- Stokalo, Ĭ. Z. An important contribution to the development of differential equations and their application. (Russian) **(82a:01047)**
- Tacii, R. M. On the order of growth of a characteristic series. (Russian) **(82j:30036)**
- Vogt, Fritz Über eine Integraldarstellung der ganzen Lösungen der Funktional-Differentialgleichungen $\sum_{k=0}^n a_k D^k y(\lambda^{n-k} z) = f(z)$. **(82h:34088)**

34A25 Analytical theory: series, transformations, transforms, operational calculus, etc. [See also 44-XX, 47E05.]

- Fokas, A. S. (with Yortsos, Y. C.) The transformation properties of the sixth Painlevé equation and one-parameter families of solutions. **82c:34010**
- Kalaba, Robert (with Rasakho, Nima) Analytical aspects of computational linear algebra. **82c:34011**
- Kimura, Toshihisa (with Matuda, Tizuko) On systems of differential equations of order two with fixed branch points. **82c:34010**
- Loseva, N. V. Calculation of the limit value of the solution of a nonstationary Riccati matrix differential equation. (Russian) **82d:34011**
- Matuda, Tizuko See Kimura, Toshihisa, **82c:34010**
- Miles, John W. The second Painlevé transcendent: a nonlinear Airy function. **82g:34008**
- Rasakho, Nima See Kalaba, Robert, **82c:34011**
- Rozenbljum, A. A. ★Интегрирование дифференциальных уравнений операторным методом. (Russian) [Integration of differential equations by the operator method] **82b:34005**
- Šemjakina, T. K. Construction of solutions of a third-order nonlinear equation that has given properties at infinity. (Russian) **82b:34008**
- Sibuya, Yasutaka Convergence of formal power series solutions of a system of nonlinear differential equations at an irregular singular point. **82c:34011**
- Starč, Zdravko F. A class of nonlinear second-order ordinary differential equations. (Serbo-Croatian. English summary) **82c:34012**
- Taku, V. D. Comitants of a three-dimensional differential system with quadratic nonlinearities. (Russian) **82c:34006**
- Veronis, George A note on the method of multiple scales. **82d:34012**
- Yortsos, Y. C. See Fokas, A. S., **82c:34010**

secondary classifications:

- Atanasov, Atanas A. On the application of the method of formal series to low energy scattering. (Bulgarian. Russian and English summaries) **82a:81042**
- Beneš, Karel Modelling transfer functions with nonzero initial conditions. (Czech and Russian summaries) **82d:93048**
- Doetsch, Gustav ★Anleitung zum praktischen Gebrauch der Laplace-Transformation und der Z-Transformation. (German) [Guide to the practical use of the Laplace transformation and the Z-transformation] **82k:44001**
- Fodčuk, V. I. (with Holmatov, A.) Construction of solutions of differential equations of neutral type in the form of special series. (Russian) **82k:34086**
- (Herschel, Rudolf) See Doetsch, Gustav, **82k:44001**
- Hille, Einar Differential operators of infinite order. **82a:34003**
- Holmatov, A. See Fodčuk, V. I., **82k:34086**
- Kirnickaja, E. F. See Vulpe, N. I., **82c:53033**
- Kočić, Vlado Lj. Theorems on nonlinear superpositions. III. Ordinary differential equations. **82f:35037**
- Theorems on nonlinear superpositions. II. The general second-order equation. **82f:35036**
- Reich, Ludwig Neuere Ergebnisse über kontinuierliche Iteration formaler Potenzreihen. **82i:13026**
- Šarin, V. I. See Zavalishin, S. T., **82f:46050**
- Tasche, Manfred (with Wrase, Burghard) Über lineare Differentialgleichungen gebrochener Ordnung und verallgemeinerte Abelsche Integralgleichungen. **82c:44003**
- Vulpe, N. I. A polynomial basis of center-affine comitants of a differential system. (Russian) **82c:34039**
- Complete algebraic basis for centroaffine invariants of a homogeneous cubic differential system. (Russian) **82c:53032**
- (with Kirnickaja, E. F.) Centroaffine invariants of a differential system with cubic nonlinearities. (Russian) **82c:53033**
- Wrase, Burghard See Tasche, Manfred, **82c:44003**
- Zavalishin, S. T. (with Šarin, V. I.) A construction of multiplication of generalized functions, and its application to singular differential equations. (Russian) **82f:46050**
- Žuravlev, V. F. Equations of motion of mechanical systems with ideal one-sided links. **82g:70006**

34A30 Linear equations and systems

- Abdel Karim, Rahmi Ibrahim Ibrahim Note on the resonance case in systems of ordinary linear differential equations. (Arabic summary) **82b:34006**
- Amel'kin, V. V. Superharmonic oscillations of totally integrable linear systems. (Russian) **82b:34007**
- Bertrand, Daniel Travaux récents sur les points singuliers des équations différentielles linéaires. **82a:34007**
- Bojarincev, Ju. E. ★Регулярные и сингулярные системы линейных обыкновенных дифференциальных уравнений. (Russian) [Regular and singular systems of linear ordinary differential equations] **82c:34007**
- Bondarenko, B. A. Normal fundamental systems of solutions of higher-order differential equations. (Russian) **82c:34011**
- Borisjuk, M. N. See Čerepennikov, V. B., **82k:34012**
- Čerepennikov, V. B. (with Borisjuk, M. N.) Estimates of the solutions of linear systems of ordinary differential equations with a variable matrix. (Russian) **82k:34012**
- Ergun, N. P. Behavior of solutions of a linear homogeneous system of differential equations in the neighborhood of a singular point. (Russian) **82k:34013**
- Ėskin, L. D. Asymptotic behavior of the solutions of $ay'' + (q(x) - \lambda)y = 0$ as $\text{Re } \lambda \rightarrow \infty$, and some of its applications. (Russian) **82c:34009**
- Fedešenko, S. F. See Sotničenko, M. A., **82c:34008**
- Friedman, Charles N. Second order linear o.d.e. and Riccati equations. **82m:34009**
- Gemidžiev, Georgi General solution of an n th-order linear homogeneous differential equation. (Bulgarian. Russian and English summaries) **82b:34010**
- González-Gascón, F. On the invariants of certain second order differential equations. **82c:34013**

- Grigorenko, V. K. An inhomogeneous system of linear differential equations with an irregular singular point. (Russian) **82b:34008**
- Hylan, Jaroslav Asymptotic properties of solutions of a class of second-order linear differential equations. (Czech) **82d:34013**
- Karasaev, I. K. A method of determining the characteristic exponents of linear homogeneous differential equations with periodic coefficients depending on the parameter. (Russian) **82f:34007**
- Kilem, W. Free and forced vibrations of a linear nonconservative system with multiple eigenvalues. **82f:34008**
- Kojecká, Jitka On some properties of functions relative to the classes of certain factor spaces. (Czech and Russian summaries) **82a:34008**
- Krasnosel'skii, A. M. Special estimates of solutions of linear differential equations. (Russian) **82g:34009**
- Krbil'a, Jaroslav Sequence of second-order strictly and specially nonadjoint linear differential equations. (Russian. Czech and English summaries) **82m:34010**
- Kušnir, R. M. On the construction of solutions of ordinary linear differential equations with piecewise constant coefficients. (Russian. English summary) **82b:34009**
- Lemmer, Roland Über gewöhnliche Differentialgleichungen zweiter Ordnung. (English summary) [Second-order ordinary differential inequalities] **82j:34008**
- Moravčík, Jozef A remark on the study of oscillatory properties of the solutions of linear differential systems. (Slovak) **82a:34009**
- Orsi, Annamaria Palamara Study of a linear equation with periodic coefficients in the dynamics of a rigid body. (Italian. English summary) **82b:34011**
- Pandit, S. G. On differential systems containing measure. (Italian summary) **82c:34012**
- Pfaff, Rainer Generalized systems of linear differential equations. **82j:34009**
- Sotničenko, M. A. (with Fedešenko, S. F.) On the question of integration of systems of differential equations. (Russian) **82c:34008**
- Vasilache, Sergiu Algebraic method for solving systems of linear differential equations with variable coefficients. **82c:34014**
- Yoshida, Masaaki On the confluence of regular and irregular singularities. **82b:34012**

secondary classifications:

- Abramov, A. A. On the behaviour of boundary conditions moved to the neighborhood of a regular singular point. (Russian) **82b:34032**
- Azuma, Takahiro See Narai, Hidekazu, **82m:81075**
- Balser, Werner Zum Einzigeitssatz in der Invariantentheorie meromorpher Differentialgleichungen. **82d:34006**
- Canovas, F. Garcia See Galvez, J.; et al., **82m:80006b**
- Carmona, F. G. See Galvez, J.; et al., **82m:80006c**
- Christol, Gilles Systèmes différentiels linéaires p -adiques, structure de Frobenius faible. (English summary) **82k:12027**
- Chudnovsky, Gregory V. Padé approximation and the Riemann monodromy problem. **82h:10047**
- Conti, Roberto Linear differential equations asymptotically equivalent to $\dot{x}=0$. (Italian) **82a:34062**
- Elbert, Á. On solutions of linear second order differential equations. **82c:34038**
- Elschner, Johannes Über die normale Auflösbarkeit von entarteten gewöhnlichen Differentialoperatoren in Räumen differenzierbarer Funktionen. **82b:47066**
- Galvez, J. (with Varon, R.) I. Transient phase kinetics of enzyme reactions. **82m:80006a**
- (with Varon, R.; Canovas, F. Garcia) II. Transient phase of two-substrate enzyme systems. **82m:80006b**
- (with Varon, R.; Carmona, F. G.) III. Kinetics of enzyme reactions with inactivation steps. **82m:80006c**
- Gera, Milan On the dimension of subsets of solutions of a third-order differential equation. (Russian. English and Slovak summaries) **82g:34036**
- Gorbačuk, O. L. (with Komarnic'kii, M. Ja.) Torsion and differentially-closed fields. (Russian) **82d:12031**
- Grigorenko, N. V. Two problems of the Galois theory of differential fields for a field of formal power series. (Russian) **82c:12032**
- Hárs, Vera See Tóth, János, **82d:80036**
- Heifric, A. I. Analytic properties of functions of convex relative solutions of second-order differential equations. (Russian) **82f:26009**
- Hohenstein, R. M. See Pan, H. H., **82d:34004**
- Johnson, Russell A. Bounded solutions of scalar, almost periodic linear equations. **82k:34052**
- Karasaev, I. K. A method of determining the characteristic indices of linear homogeneous differential equations with periodic coefficients. (Russian) **82g:34063**
- Kard, P. A method of solving one-dimensional wave equations. (Russian. Estonian and English summaries) **82j:34004**
- Komarnic'kii, M. Ja. See Gorbačuk, O. L., **82d:12031**
- Leung, Anthony W. Connection formulas and behavior in the large for solutions of linear differential equations depending singularly on a parameter. **82d:34076**
- Lizárev, A. D. Differential equations of hypergeometric type. (Russian) **82b:33006**
- Machover, Maurice The alternative theorem and the nonselfadjoint generalized Green's function. **82b:34019**
- Mingarelli, Angelo B. On a conjecture for oscillation of second-order ordinary differential systems. **82j:34028**
- Narai, Hidekazu (with Azuma, Takahiro) On the definition of a positive frequency part for a quantized scalar field in several Robertson-Walker universes. **82m:81075**
- Neuman, František Transformations of n th-order linear differential equations. (Russian) **82m:34038**
- Pan, H. H. (with Hohenstein, R. M.) A method of solution for an ordinary differential equation containing symbolic functions. **82d:34004**
- Pisarenok, V. P. The behavior of solutions of a class of first-order differential equations in the complex plane. (Russian) **82b:34007**
- Rovder, Jozef Asymptotic behaviour of solutions of the differential equation of the fourth order. (Russian summary) **82a:34042**
- Šemnikov, V. N. Estimate of error of linearization of a nonlinear differential system in the critical case. (Russian) **82d:34014**

- Schwabik, Štefan Differential equations with interface conditions. (Czech summary) (82j:34019)
- Šidlovský, A. B. Estimate of a measure of mutual transcendence of values of E -functions connected by arbitrary algebraic equations over $\mathbb{C}(z)$. (Russian) (82e:10064)
- Stafney, James D. Density of the linear span of principal solutions of second order linear differential equations. (82m:41018)
- Staněk, Svatoslav On the dispersion structure of the differential equation $y'' = q(t)y$ having in the generalized Floquet theory the same characteristic multipliers. (Czech and Russian summaries) (82h:34046)
- On an application of the generalized Floquet theory to the transformation of the equation $y'' = q(t)y$ into its associated equation. (Czech and Russian summaries) (82h:34047)
- Tóth, János (with Hárs, Vera) On the inverse problems of compartment systems. (Hungarian. English summary) (82d:80036)
- Varon, R. See Galvez, J., (82m:80006)
- Žanabai, S. N. Asymptotic stability with respect to the first approximation of solutions of a countable system of differential equations when the growth of right-hand sides depends on time t . (Russian) (82c:34058)

34A34 Nonlinear equations and systems, general

- Bertolino, Milorad Note sur un théorème de Michel Petrovitch. 82j:34009
- Brenig, L. (with Fairén, V.) Analytical approach to initial-value problems in nonlinear systems. 82g:34010
- Deng, Nai Yang (with Ma, Dian Rong) On the existence intervals of the solutions of certain nonlinear differential equations. (Chinese) 82g:34011
- Fairén, V. See Brenig, L., 82g:34010
- Kalaba, Robert See Zagustina, E. A., 82f:34010
- Kaminaga, Takashi A variation of Kneser's theorem and boundary value problems. 82h:34010
- Kerner, Edward H. Universal formats for nonlinear ordinary differential systems. 82j:34010
- Ma, Dian Rong See Deng, Nai Yang, 82g:34011
- Martynov, I. P. A property of simplified n th-order differential equations. (Russian. English summary) 82f:34009
- Niculescu, Cornelia A class of first-order nonlinear differential equations; geometric properties of the integral curves. (Romanian. English summary) 82h:34013
- Okamoto, Kazuo Polynomial Hamiltonians associated with Painlevé equations. I. 82j:34010a
- Polynomial Hamiltonians associated with Painlevé equations. II. Differential equations satisfied by polynomial Hamiltonians. 82j:34010b
- Ščennikov, V. N. Estimate of error of linearization of a nonlinear differential system in the critical case. (Russian) 82d:34014
- Šeda, Václav A class of differential equations similar to linear equations. 82d:34015
- Zagustina, E. A. (with Kalaba, Robert) The Cauchy system for nonlinear problems with two boundary conditions. (Russian) 82f:34010

secondary classifications:

- Elias, Uri (with Kreith, Kurt) Nonlinear differential systems with monotone solutions. (82f:34038)
- Ezeilo, James O. C. (with Tejumola, Haroon O.) Periodic solutions of a certain fourth order differential equation. (Italian summary) (82h:34053)
- Garner, J. B. (with Kellogg, R. Bruce) The diffusion-convection equation with pressure. (82j:76081)
- Gutowski, Roman Investigation of the behavior of the solutions of nonlinear differential equations of motion by means of integral inequalities. (Russian. English summary) (82h:34040)
- Hale, Jack K. Some recent results on dissipative processes. (82h:34059)
- Ishii, Hiroyuki Prolongation of solutions of nonlinear ordinary differential equations. (82h:34006)
- Itoh, Yoshiaki Nonassociative algebra and Lotka-Volterra equation with ternary interaction. (82h:92034)
- Iwano, Masahiro On a general solution of a nonlinear 2-system of the form $x^i dx = \Lambda w + xh(x, w)$ with a constant diagonal matrix Λ of signature $(1, 1)$. (82d:34008)
- Kellogg, R. Bruce See Garner, J. B., (82j:76081)
- Kocić, Vlado Lj. Conditions for the integrability of a second order nonlinear differential equation. (82g:34005)
- de Korvin, André (with Roberts, Charles E., Jr.) Double adjoints of Hammerstein functionals defined on continuous functions. (82f:47081)
- Kreith, Kurt See Elias, Uri, (82f:34038)
- Kreith, Horst (with Sprekels, Jürgen) On the uniqueness of conduction in relaxation-case semiconductors. (German summary) (82h:82040)
- Milosević, Radiroje On an iterative procedure for the solution of differential equations. (Serbo-Croatian. English summary) (82k:34005)
- Nguyen The Hoin Asymptotic behavior of solutions of nonlinear systems of differential equations. (Russian) (82c:34047)
- Pandit, S. G. On differential systems containing measure. (Italian summary) (82c:34012)
- Polsniakowski, Z. On some ordinary differential equations. (82m:34033)
- Powder, Charles An existence theorem for solutions of n th order nonlinear differential equations in the complex domain. (82h:34008)
- Ray, John R. Nonlinear superposition law for generalized Ermakov systems. (82d:70031)
- Robba, Philippe Lemmes de Hensel pour les opérateurs différentiels. Application à la réduction formelle des équations différentielles. (82k:12022)
- Roberts, Charles E., Jr. See de Korvin, André, (82f:47081)
- Shaljah, Č. A. On the oscillatory nature of solutions of some two-dimensional systems of differential equations. (Russian) (82k:34038)
- Sibuya, Yasutaka Convergence of formal power series solutions of a system of nonlinear differential equations at an irregular singular point. (82c:34011)

- (with Sperber, Steven) Arithmetic properties of power series solutions of algebraic differential equations. (82j:12022)
- Smith, Wanda W. See Spikes, Paul W., (82a:34039)
- Sperber, Steven See Sibuya, Yasutaka, (82j:12022)
- Spikes, Paul W. (with Smith, Wanda W.) Some asymptotic properties of the solutions of perturbed nonlinear differential equations. (82a:34039)
- Sprekels, Jürgen See Kreith, Horst, (82h:82040)
- Tejumola, Haroon O. See Ezeilo, James O. C., (82h:34053)
- Valiev, K. G. The theory of nonlinear projectors of solutions. (Russian) (82g:34061)
- Zeragija, D. P. On branching of solutions to the problem of stability of rods experiencing joint action of compression and torsion. (Russian) (82k:73038)

34A35 Differential equations of infinite order

- Balašova, G. S. Behavior of the solution of some boundary value problems when the order of the equation increases indefinitely. (Russian) 82g:34012
- Colombeau, Jean-François (with Perrot, B.; Dwyer, T. A. W., III) On the solvability of differential equations of infinite order in nonmetrizable spaces. 82m:34011
- Dwyer, T. A. W., III See Colombeau, Jean-François; et al., 82m:34011
- Eplafanov, O. V. A differential operator with polynomial coefficients in classes of entire functions with a given estimator of the indicator. (Russian) 82c:34013
- Mazanik, S. A. Asymptotically equivalent two-dimensional linear differential systems. (Russian) 82g:34013
- Perrot, B. See Colombeau, Jean-François; et al., 82m:34011

secondary classifications:

- Čan Dyk Van A boundary value problem for infinite-order nonlinear ordinary differential equations with rapidly [slowly] increasing coefficients. (Russian) (82c:34018)
- Kung, Joseph P. S. (with Rota, Gian-Carlo) On the differential invariants of a linear ordinary differential equation. (82i:12026)
- Myslivec, S. G. Sets of values of a differential operator of infinite order with constant coefficients in spaces of holomorphic functions. (Russian) (82j:30048)
- Rota, Gian-Carlo See Kung, Joseph P. S., (82i:12026)
- Singer, Michael F. Liouvillian solutions of n th order homogeneous linear differential equations. (82i:12028)

34A40 Differential inequalities

- Deo, S. G. (with Ladde, G. S.) Some n th order differential inequalities. 82j:34011
- Dunninger, D. R. Maximum principles for fourth order ordinary differential inequalities. 82j:34011
- Gard, Thomas C. Strongly flow-invariant sets. 82c:34015
- Grammatikopoulos, Myron K. See Kulenović, Mustafa, 82h:34014
- Kulenović, Mustafa (with Grammatikopoulos, Myron K.) On the asymptotic behavior of second order differential inequalities with alternating coefficients. 82h:34014
- Ladde, G. S. See Deo, S. G., 82j:34011
- Mingarelli, Angelo B. On a Stieltjes version of Gronwall's inequality. 82c:34014
- Turincic, Mihai Differential inequalities via maximal element techniques. 82g:34014

secondary classifications:

- Erbe, L. A note on disconjugate differential equations and growth estimates. (82h:34047)
- Howes, Fred A. Differential inequalities of higher order and the asymptotic solution of nonlinear boundary value problems. (82k:34019)
- Kamont, Zdzisław On the Chaplygin method for differential-functional equations. (82c:34072)
- Leela, S. The role of quasolutions in the study of differential equations. (82i:34035)
- Lepins, L. On the concepts of lower and upper functions. (Russian) (82c:34019)
- Seda, Václav A class of differential equations similar to linear equations. (82c:34015)

34A45 Theoretical approximation of solutions

- Aširov, S. A remark on the convergence of Tonelli approximations. (Russian) 82k:34014
- Doedel, Eusebius J. (with Reddien, G. W.) Computation of bifurcation branches using projection methods. 82g:34015
- Litvinec, P. D. On the existence of a solution to an operator equation in an approximation method. (Russian) 82d:34016
- Mincheva, M. I. A solution of the Duffing equation by the method of "close" operators. (Bulgarian. Russian and French summaries) 82h:34011
- Reddien, G. W. See Doedel, Eusebius J., 82g:34015
- Rubel, Lee A. A universal differential equation. 82c:34015
- Starokadomskii, L. O. Approximate solution of some differential equations by means of Chebyshev polynomials. (Ukrainian. Russian summary) 82g:34016
- Steeb, W.-H. (with Wilhelm, F.) Nonlinear autonomous systems of differential equations and Carleman linearization procedure. 82h:34012
- White, Warren H. A global existence theorem for Smoluchowski's coagulation equations. 82c:34016
- Wilhelm, F. See Steeb, W.-H., 82h:34012

secondary classifications:

- Adomian, George (with Malakian, K.) A comparison of the iterative method and Picard's successive approximations for deterministic and stochastic differential equations. (82f:60130)
- Aziz, Tariq See Jain, M. K., (82h:65008)
- Bogar, Gary (with Jeppson, Ron) Approximate solutions of linear differential systems with boundary conditions. (82h:34017)
- Dudka, N. A. (with Suvar, B. A.) Two-sided differential inequalities with deviating argument. (Russian) (82h:34086)

- Filozof, L. I. See Mahomed, M. S., (82j:41009)
- Heading, J. The equality of multiple integrals in the series development of a reflection coefficient for waves governed by a general linear differential equation. (82c:78008)
- Jain, M. K. (with Aziz, Tariq) Spline function approximation for differential equations. (82h:65008)
- Jeppson, Ron See Bogar, Gary, (82b:34017)
- Jerome, Joseph W. Convergence for operators of hyperbolic type. (82m:34061)
- Mahomed, M. S. (with Filozof, L. I.) Domain of convergence of approximation polynomials. (Russian) (82j:41009)
- Malakian, K. See Adomian, George, (82f:60130)
- Marusjak, A. G. A two-sided method for solving a two-point boundary value problem with a parameter. (Russian) (82m:34018)
- Milošević, Radivoje On an application of the Caplygin theorem to the solution of first- and second-order ordinary differential equations. (Serbo-Croatian. English summary) (82j:34005)
- Nguyễn Văn Đạo Nonlinear oscillations of third order systems. I. Autonomous systems. (Russian and Polish summaries) (82m:34035a)
- Nonlinear oscillations of third order systems. II. Nonautonomous systems. (Polish and Russian summaries) (82m:34035b)
- Nonlinear oscillations of the third order systems. III. Parametric oscillation. (Polish and Russian summaries) (82m:34035c)
- Orsi, Annamaria Palamara Study of a linear equation with periodic coefficients in the dynamics of a rigid body. (Italian. English summary) (82h:34011)
- Osgood, Charles F. The approximation of solutions to linear homogeneous differential equations by rational functions. (82c:10044)
- Rădulescu, Marius (with Rădulescu, Sorin) Approximation, existence and uniqueness of solutions to ordinary differential equations in Banach spaces. (82d:34093)
- Rădulescu, Sorin See Rădulescu, Marius, (82d:34093)
- Raggett, G. F. On the iterative solution of the limiting susceptible population in a model of epidemiology. (82c:92025)
- Ronto, V. A. See Samoilenko, A. M., (82c:65043)
- Samoilenko, A. M. (with Ronto, V. A.) A numerical-analytic method for solving boundary value problems for ordinary differential equations. (Russian) (82c:65043)
- Šušar, B. A. See Dudka, N. A., (82h:34086)

34A50 Numerical approximation of solutions [For numerical analysis, see 65Lxx.]

- Antoškina, G. I. See Laptev, Ju. I., (82b:34013)
- Laptev, Ju. I. (with Antoškina, G. I.) An interval algorithm for solution of the Cauchy problem on the basis of the asymptotic functional parameter method. (Russian) (82b:34013)

secondary classifications:

- Borisjuk, M. N. See Čerepennikov, V. B., (82c:34012)
- Čerepennikov, V. B. (with Borisjuk, M. N.) Estimates of the solutions of linear systems of ordinary differential equations with a variable matrix. (Russian) (82c:34012)
- El Dokany, I. See El Konyaly, E. H.; et al., (82a:65046)
- El Konyaly, E. H. (with Sobiah, A.; El Dokany, I.) Solution of $\dot{X} = A_1 X + X A_2 + D$, $X(0) = C$ and receding horizon problem. (82a:65046)
- Lafferrere, G. See Zadunaisky, Pedro E., (82b:65078)
- Levin, Bruce R. (with Stewart, Frank M.) The population biology of bacterial plasmids: a priori conditions for the existence of mobilizable nonconjugative factors. (82c:92024)
- Sobiah, A. See El Konyaly, E. H.; et al., (82a:65046)
- Stewart, Frank M. See Levin, Bruce R., (82c:92024)
- Zadunaisky, Pedro E. (with Lafferrere, G.) On an iterative improvement of the approximate solution of some ordinary differential equations. (82b:65078)

34A55 Inverse problems

- Bidaibekov, E. Y. Some inverse problems for linear differential equations. (Russian. Kazakh summary) (82c:34015)
- Paladhi, Basudeb Ray The inverse problem associated with a pair of second-order differential equations. (82h:34015)
- Panahov, E. S. Inverse problem in two spectra for a differential operator with a singularity at zero. (Russian. Azerbaijani and English summaries) (82f:34011)
- secondary classifications:
- Goldberg, Wallace On a periodic boundary value problem with a finite number of gaps in its spectrum. (82i:34028)
- Hačatrian, I. G. An inverse problem. (Russian. Armenian summary) (82b:34030)
- Lǐ, Yi Shen One special inverse problem of the second order differential equation on the whole real axis. (Chinese summary) (82h:34023)
- Zubov, V. I. The problem of the existence of an electromagnetic field causing given motions of charged particles. (Russian) (82b:78011)

34A60 Equations with multivalued right-hand sides [See also 49A50, 49E10.]

- Ansorge, Rainer (with Taubert, K.) Set-valued collectively compact operators and applications to set-valued differential equations. (German summary) (82c:34012)
- Approximation of set-valued operators by sequences of set-valued collectively compact operators. (82d:34017)
- Bulgakov, A. I. Kneser's theorem for a class of integral inclusions. (Russian) (82b:34014)
- Caljuk, V. Z. Perturbations of exponentially stable differential inclusions by generalized functions. (Russian) (82j:34012)
- Čugunov, P. I. On the dependence of solutions of a differential inclusion on initial conditions and the parameter. (Russian) (82m:34012)

- Jagubov, M. A. See Otakulov, S., (82i:34013)
- Jarník, Jiří Constructing the minimal differential relation with prescribed solutions. (Czech summary) (82a:34011)
- Laborde, Patrick Sur un problème d'évolution non monotone. (English summary) (82b:34015)
- Łojasiewicz, Stanisław, Jr. The existence of solutions for lower semicontinuous orientor fields. (Russian summary) (82j:34013)
- Otakulov, S. (with Jagubov, M. A.) Some properties of differential inclusions and their applications to optimal control. (Russian. Azerbaijani and English summaries) (82i:34013)
- Pruszek, Tadeusz An operational equation and differential equations with multivalued nonconvex right-hand side (82h:34016)
- Tallós, Péter On Nash-equilibrium trajectories of multivalued differential equations. (82g:34017)
- Taubert, K. See Ansorge, Rainer, (82i:34012)

secondary classifications:

- Aširov, S. See Mamedov, Ja. D.; et al., (82i:26011)
- Atdaev, S. See Mamedov, Ja. D.; et al., (82i:26011)
- Bardaro, Carlo (with Pucci, Patrizia) An existence theorem for generalized differential equations in Banach spaces. (Italian) (82f:47072)
- Bulgakov, A. I. (with Maksimov, V. P.) Functional and functional-differential inclusions with Volterra operators. (Russian) (82j:34073)
- Čugunov, P. I. Correct solutions of differential inclusions. (Russian) (82f:49012)
- Goncharov, I. A. See Tolstonogov, A. A., (82d:34104)
- Gurov, V. M. See Pseničnyi, B. N., (82c:49035)
- Irisov, A. E. (with Tonkov, E. L.) Sufficient conditions for the existence and optimality of periodic solutions of differential inclusions. (Russian) (82b:49025)
- Ito, Takatoshi A Filippov solution of a system of differential equations with discontinuous right-hand sides. (82c:90028)
- Maksimov, V. P. See Bulgakov, A. I., (82j:34073)
- Mamedov, Ja. D. (with Aširov, S.; Atdaev, S.) ★ Теорема о неравенствах. (Russian) [Theorems on inequalities] (82i:26011)
- Matei, Pavel Evolution equations with time-dependent domains. (82c:34074)
- Pseničnyi, B. N. (with Gurov, V. M.) On necessary conditions for the extremum on convex differential inclusions with phase constraints. (Russian) (82c:49035)
- Pucci, Patrizia See Bardaro, Carlo, (82f:47072)
- Rzeżuchowska, Grazyna Differential inclusion with dissipative operator. (82i:34074)
- Showalter, R. E. Singular nonlinear evolution equations. (82c:34077)
- Tolstonogov, A. A. (with Goncharov, I. A.) On functional-differential inclusions in a Banach space with nonconvex right-hand side. (Russian) (82d:34104)
- Tonkov, E. L. See Irisov, A. E., (82b:49025)

34A99 None of the above, but in this section

- Bularas, Driss Affine invariants of differential systems. (Russian) (82m:34013)
- Charrière, Hélène Triangulation formelle de certains systèmes de Pfaff complètement intégrables et application à l'étude C^∞ des systèmes non linéaires. (82d:34018)
- Gorbuzov, V. N. Some classes of autonomous systems with a particular integral. (Russian) (82m:34014)
- Lakshmikantham, V. (with Leela, S.; Oğuztöreli, M. N.) Quasisolutions, vector Lyapunov functions, and monotone method. (82b:34016)
- Leela, S. See Lakshmikantham, V.; et al., (82b:34016)
- Oğuztöreli, M. N. See Lakshmikantham, V.; et al., (82b:34016)
- Sibirskii, K. S. Unitary invariants of differential systems. (Russian) (82m:34015)
- Ueno, Kimio Monodromy preserving deformation of linear differential equations with irregular singular points. (82f:34012)
- Monodromy preserving deformation and its application to soliton theory. (82f:34013)

secondary classifications:

- Bauhain, Marc Liaison entre équations différentielles de type Schrödinger réduit et équations de champs non linéaires. (English summary) (82c:81076)
- Dwork, B. Arithmetic theory of differential equations. (82i:12021)
- Matsuda, Michihiko ★ First-order algebraic differential equations. (82d:12015)
- Nishioka, Keiji A theorem of Painlevé on parametric singularities of algebraic differential equations of the first order. (82g:12026)
- Schmidt, Peter Substitution methods for the automatic symbolic solution of differential equations of first order and first degree. (82c:68034)

34Bxx Boundary value problems

secondary classifications:

- (Hurst, John A.) See Reid, William T., (82f:34002)
- Reid, William T. ★ Sturmian theory for ordinary differential equations. (82f:34002)

34B05 Linear equations

- Barnes, David C. Lower bounds for eigenvalues of Sturm-Liouville systems. (82b:34016)
- Bogar, Gary (with Jeppson, Ron) Approximate solutions of linear differential systems with boundary conditions. (82b:34017)
- Das, Jyoti (with Sett, Jayasri) On the separation property of symmetric ordinary fourth-order differential expressions. (82b:34018)
- Emel'janov, K. V. Asymptotic behavior of the solution of the first boundary value problem for the equation $eu'' + \alpha a(x)u' - b(x)u = f(x)$. (Russian) (82c:34014)
- Solution of the first boundary value problem for an ordinary differential equation with a small parameter. (Russian) (82m:34016)

- Gewert, Marian On a two-point boundary value problem for a system of linear differential equations. **82j:34014**
- Jeppoon, Ron See Bogar, Gary, **82b:34017**
- Krojan, R. On a boundary value problem for a linear differential equation. (Russian) **82i:34015**
- Machover, Maurice The alternative theorem and the nonselfadjoint generalized Green's function. **82b:34019**
- Mukhinov, N. M. Solution of a boundary value problem for a system of second-order ordinary vector-differential equations. (Russian) **82a:34012**
- Muldowney, James S. On invertibility of linear ordinary differential boundary value problems. **82g:34018**
- Murty, K. Narasimha On boundary value problems. **82b:34020**
- Schreiber, Robert Regularity of singular two-point boundary value problems. **82b:34021**
- Schwahik, Štefan Differential equations with interface conditions. (Czech summary) **82d:34019**
- Sett, Jayasri See Das, Jyoti, **82b:34018**
- Staněk, Svatoslav Two-point boundary problem in a second order nonhomogeneous linear differential equation. (Czech and Russian summaries) **82b:34022**

secondary classifications:

- Amenzade, R. Ju. Waves in a nonuniform tube containing a liquid. (Russian) **(82c:76115)**
- Browne, Patrick J. (with Nilsen, Rodney) The two-sided factorization of ordinary differential operators. **(82i:47056)**
- Derguzov, V. I. On the discrete spectrum of a periodic boundary value problem connected with the study of periodic waveguides. (Russian) **(82g:78023)**
- Knowles, Ian W. On the boundary conditions characterizing J -selfadjoint extensions of J -symmetric operators. **(82i:47052)**
- Meyer, Sybille Eine asymptotische Lösungsdarstellung von nichtselbst-adjungierten Randwertaufgaben für entartete gewöhnliche Differentialgleichungen 2. Ordnung mit einem kleinen Parameter bei den höchsten Ableitungen. **(82g:34079)**
- Nijima, Kōichi Numerical computation of solutions of two-point boundary value problems with a boundary layer. **(82j:65055)**
- Nilsen, Rodney See Browne, Patrick J., **(82i:47056)**
- Ridenhour, Jerry Green's functions and linear boundary value problems. **(82c:34026)**
- Spreuer, H. A method for the computation of bounds with convergence of arbitrary order for ordinary linear boundary value problems. **(82j:65057)**

34B10 Multipoint boundary value problems

- Abdel Karim, Rahim Ibrahim Ibrahim Three-point boundary value problem of the third order. (Arabic summary) **82a:34020**
- Agarwal, Ravi P. Boundary value problems for higher order differential equations. **82k:34017**
- Alekseenko, M. I. A condition for unique solvability of a periodic boundary value problem. (Russian. English summary) **82d:34021**
- Boucherif, Abdelkader Nonlinear three-point boundary value problems. **82a:34013**
- Freiling, Gerhard Irregular multipoint eigenvalue problems. **82f:34014**
- Expansion problems with irregular multipoint boundary conditions. **82i:34016**
- Lasota, Andrzej On the existence and uniqueness of solutions of a multipoint boundary value problem. **82c:34017**
- Lutz, Robert (with Sari, Tewfik) Sur le comportement asymptotique des solutions dans un problème aux limites non linéaires. (English summary) **82f:34015**
- Mattheij, R. M. M. Estimating the discretization error in three-point difference schemes for second order linear singularly perturbed BVP. **82b:34023**
- Murty, K. Narasimha See Rao, D. R. K. S.; et al., **82f:34016**
- Ojika, Takeo (with Welsh, Wayne) The scaling method for free interface problems in ordinary differential equations. **82i:34017**
- Panfilov, N. G. On multipoint boundary value problems for linear systems of differential singularly perturbed equations. (Russian) **82b:34024**
- Puza, B. Solvability of some boundary value problems for systems of ordinary differential equations. (Russian) **82m:34017**
- Rao, A. S. See Rao, D. R. K. S.; et al., **82f:34016**
- Rao, D. R. K. S. (with Murty, K. Narasimha; Rao, A. S.) Three-point boundary value problems associated with third order differential equations. **82f:34016**
- Sari, Tewfik See Lutz, Robert, **82f:34015**
- Seda, Valter On a boundary value problem of the fourth order. (Czech summary) **82g:34019**
- Welsh, Wayne See Ojika, Takeo, **82i:34017**

secondary classifications:

- Chen, Chuan Miao The good points of the approximate solution of a two-point boundary value problem by the Galerkin method. (Chinese. English summary) **(82c:65085)**
- Gentry, R. D. (with Travis, Curtis C.) The existence and extremal characterization of eigenvalues for an n th order multiple point boundary value problem. **(82g:34023)**
- Greguš, Michal Bands of solutions of a differential equation of the third order with continuous coefficients and their application. (Slovak and Russian summaries) **(82f:34033)**
- Jiang, Fu Ru On boundary value problems for a class of ordinary differential equations with turning points. (Chinese. English summary) **(82m:34056)**
- Kalaba, Robert See Zagustina, E. A., **(82f:34010)**
- Monastyrnyi, P. I. Connection of the isolation of solutions with the convergence of shooting methods. (Russian) **(82c:65051)**
- Müller-Pfeiffer, Erich Existence of conjugate points for second and fourth order differential equations. **(82m:34029)**
- Ridenhour, Jerry On the sign of Green's functions for multipoint boundary value problems. **(82k:34027)**
- Staněk, Svatoslav Two-point boundary problem in a second order nonhomogeneous linear differential equation. (Czech and Russian summaries) **(82b:34022)**

- Travis, Curtis C. See Gentry, R. D., **(82g:34023)**
- Zagustina, E. A. (with Kalaba, Robert) The Cauchy system for nonlinear problems with two boundary conditions. (Russian) **(82f:34010)**
- Zibolen, Ė. Asymptotic solutions of a boundary value problem with degenerate limit spectrum. (Russian) **(82b:34074)**

34B15 Nonlinear boundary value problems

- Agarwal, Ravi P. Best possible length estimates for nonlinear boundary value problems. **82f:34017**
- Anichini, Giuseppe Addendum and corrigendum: "Nonlinear problems for systems of differential equations" [Nonlinear Anal. 1 (1976/77), no. 6, 691-699; MR 58 #28782]. **82a:34014**
- Anišenko, R. I. Theorems on the existence of a solution of a problem of a free negative ion in the Thomas-Fermi-Dirac model. (Russian) **82f:34018**
- Bailey, Paul B. (with Norris, Michael J.) On the interval of existence for nonlinear two-point boundary value problems. **82c:34018**
- Balla, Katalin On the solution of singular boundary value problems for nonlinear systems of ordinary differential equations. (Russian) **82c:34016**
- Baxley, John V. Nonlinear two-point boundary value problems. **82c:34017**
- (with Brown, Sarah E.) Existence and uniqueness for two-point boundary value problems. **82f:34019**
- Bowman, T. T. Bifurcation of solutions of nonlinear boundary value problems. **82b:34017**
- Brown, Sarah E. See Baxley, John V., **82f:34019**
- Can Dyk Van A boundary value problem for infinite-order nonlinear ordinary differential equations with rapidly (slowly) increasing coefficients. (Russian) **82c:34018**
- Cecchi, M. (with Marini, M.; Zezza, P. L.) Boundary value problems for nonlinear differential equations on noncompact intervals. **82f:34020**
- Conti, Giuseppe (with Iannacci, Rita) Using a nonlinear spectral theory to solve boundary value problems. **82k:34018**
- Das, K. M. (with Lalli, B. S.) Boundary value problems for $y''' = f(x, y, y', y'')$ **82i:34018**
- Henderson, Johnny Existence of solutions of right focal point boundary value problems for ordinary differential equations. **82j:34015**
- Howes, Fred A. Differential inequalities of higher order and the asymptotic solution of nonlinear boundary value problems. **82k:34019**
- Iannacci, Rita See Conti, Giuseppe, **82k:34018**
- Israilov, S. V. Existence of a solution to the singular Cauchy-Nicoletti problem for infinite systems of ordinary differential equations. (Russian) **82j:34016**
- Kull, Hans Über eine Klasse von nichtlinearen Randwertproblemen: Änderung des kritischen Parameters bei Symmetrisierungen. (English summary) **82a:34022**
- Kurtz, J. C. A class of singular nonlinear boundary value problems. **82j:34017**
- Lakshmikantham, V. (with Vatsala, A. S.) Quasilinear and monotone method for systems of nonlinear boundary value problems. **82b:34025**
- Lalli, B. S. See Das, K. M., **82i:34018**
- Leggett, Richard W. See Williams, Lynn R., **82c:34020**
- Lepins, L. On the concepts of lower and upper functions. (Russian) **82c:34019**
- Marini, M. See Cecchi, M.; et al., **82f:34020**
- Marusjak, A. G. A two-sided method for solving a two-point boundary value problem with a parameter. (Russian) **82m:34018**
- Nagle, R. Kent (with Singkofer, Karen) Nonlinear ordinary differential equations at resonance with slowly varying nonlinearities. **82c:34020**
- Nesterenko, L. I. A two-sided method for solving the two-point boundary value problem for a system of ordinary differential equations. (Russian. English summary) **82a:34023**
- Norris, Michael J. See Bailey, Paul B., **82c:34018**
- Perko, L. M. A class of superquadratic boundary value problems of capillary type. **82c:34021**
- Primicerio, Angela Selvaggi On a terminal value problem for a class of nonlinear ordinary differential equation. (Italian summary) **82a:34015**
- Rosenblat, S. (with Szeto, R. K.-H.) Multiple solutions of nonlinear boundary value problems. **82a:34016**
- Sadyrbaev, F. Ž. A two-point boundary value problem for a system of first-order ordinary differential equations. (Russian) **82b:34026**
- Ljapunov functions and the solvability of the first boundary value problem for an ordinary second-order differential equation. (Russian) **82a:34017**
- Ščerbina, G. V. Nonlinear boundary value problems for second-order equations. (Russian) **82j:34018**
- Seda, Valter On a generalization of the Thomas-Fermi equation. (Slovak and Russian summaries) **82g:34020**
- Šešter, B. L. On positive solutions of a nonlinear Sturm-Liouville problem. (Russian. Georgian and English summaries) **82f:34021**
- Singkofer, Karen See Nagle, R. Kent, **82c:34020**
- Szeto, R. K.-H. See Rosenblat, S., **82a:34016**
- Toma, Ileana On polynomial differential equations. **82g:34021**
- Utz, W. R. The existence of solutions of a third-order boundary value problem. **82d:34024**
- Vatsala, A. S. See Lakshmikantham, V., **82b:34025**
- Voss, Heinrich Positive solutions of superlinear boundary value problems. **82d:34025**
- Williams, Lynn R. (with Leggett, Richard W.) Unique and multiple solutions of a family of differential equations modeling chemical reactions. **82k:34020**
- Zeza, P. L. See Cecchi, M.; et al., **82f:34020**
- Zubov, S. V. A method for solving boundary value problems. (Russian) **82a:34018**

secondary classifications:

- Agarwal, Ravi P. Boundary value problems for higher order differential equations. **(82k:34017)**
- Ascher, U. (with Russell, Robert D.) Reformulation of boundary value problems into "standard" form. **(82f:65064)**
- Bebernes, Jerry (with Martelli, Mario) On the structure of the solution set for periodic boundary value problems. **(82c:47066)**

- Boucherif, Abdelkader Nonlinear three-point boundary value problems. (82a:34013)
- Cecchi, M. (with Marini, M.; Zezza, P. L.) A compactness theorem for integral operators and applications. (82b:47084)
- Cepitis, J. On the solvability of a boundary value problem arising from the study of the motion of a fluid between two rotating discs. (Russian) (82b:76074)
- Conley, Charles (with Smoller, Joel) Topological techniques in reaction-diffusion equations. (82j:35014)
- Drăbeč, Pavel Remarks on multiple periodic solutions of nonlinear ordinary differential equations. (82a:34053)
- Ekland, Ivar (with Lasry, Jean-Michel) Problèmes variationnels non convexes en dualité. (English summary) (82g:58021)
- Gupta, Chaitan P. On functional equations of Fredholm and Hammerstein type with applications to existence of periodic solutions of certain ordinary differential equations. (82e:47078)
- Hegedűs, J. Two-sided approximations of the solutions of certain differential and operator equations. (Russian) (82d:65048)
- de Hoog, F. R. (with Weiss, R.) An approximation theory for boundary value problems on infinite intervals. (German summary) (82f:65087)
- Howes, Fred A. Singularly perturbed semilinear systems. (82j:34056)
- Kaminogo, Takashi On a boundary value problem for a nonlinear Bessel equation. (82b:34031)
- Kedem, Gershon A posteriori error bounds for two-point boundary value problems. (82b:65062)
- Kopell, Nancy (with Parter, Seymour V.) A complete analysis of a model nonlinear singular perturbation problem having a continuous locus of singular points. (82g:34086)
- Lange, Charles G. Branching from large eigenvalues of nonlinear Sturm-Liouville systems. (82a:34023)
- Lasry, Jean-Michel See Ekland, Ivar, (82g:58021)
- Ling, Rina Singular perturbation for nonlinear boundary value problems. (82j:34057)
- Maksudov, F. G. (with Veliev, S. G.) A nonlinear boundary value problem for the Dirac equation. I. (Russian. Azerbaijani and English summaries) (82j:34022)
- Marini, M. See Cecchi, M.; et al., (82b:47084)
- Martelli, Mario See Bebernes, Jerry, (82d:47066)
- Milojević, P. S. Fredholm alternatives and surjectivity results for multivalued A -proper and condensing mappings with applications to nonlinear integral and differential equations. (82a:47051)
- Parter, Seymour V. See Kopell, Nancy, (82g:34086)
- Peitgen, Heinz-Otto (with Saupe, Dietmar; Schmitt, Klaus) Nonlinear elliptic boundary value problems versus their finite difference approximations: numerically irrelevant solutions. (82b:65076)
- Puža, B. Solvability of some boundary value problems for systems of ordinary differential equations. (Russian) (82m:34017)
- Russell, Robert D. See Ascher, U., (82f:65084)
- Saupe, Dietmar See Peitgen, Heinz-Otto; et al., (82b:65076)
- Schmitt, Klaus See Peitgen, Heinz-Otto; et al., (82b:65076)
- Seda, Valter On a boundary value problem of the fourth order. (Czech summary) (82g:34019)
- Smoller, Joel (with Wasserman, Arthur G.) Global bifurcation of steady-state solutions. (82d:58056)
- See also Conley, Charles, (82j:35014)
- Struwe, Michael Multiple solutions of anticonvex boundary value problems for a class of ordinary differential equations of second order. (82a:34056)
- Veliev, S. G. See Maksudov, F. G., (82j:34022)
- Wasserman, Arthur G. See Smoller, Joel, (82d:58056)
- Weiss, R. See de Hoog, F. R., (82f:65087)
- Zecca, P. L. See Cecchi, M.; et al., (82b:47084)
- 34B20 Weyl theory and its generalizations
- Becker, Ronald I. Limit circle criteria for $2n$ th order differential operators. 82i:34019
- Limit circle criteria for fourth order differential operators with an oscillatory coefficient. 82i:34020
- Graef, John R. (with Spikes, Paul W.) The limit point-limit circle problem for nonlinear equations. (See 82k:34002)
- Hinton, Don B. (with Shaw, J. K.) On Titchmarsh-Weyl $M(\lambda)$ -functions for linear Hamiltonian systems. 82h:34018
- Schultze, Bernd A limit-point criterion for $2n$ th order symmetric differential expressions. 82m:34019
- Shaw, J. K. See Hinton, Don B., 82h:34018
- Spikes, Paul W. See Graef, John R., (See 82k:34002)
- secondary classifications:
- Coz, Marcel A direct study of a Marchenko fundamental equation with centripetal potential. (82i:81126)
- Das, Jyoti (with Sett, Jayasri) On the separation property of symmetric ordinary fourth-order differential expressions. (82b:34018)
- Everitt, W. N. Legendre polynomials and singular differential operators. (82m:34020)
- Fulton, Charles T. Singular eigenvalue problems with eigenvalue parameter contained in the boundary conditions. (82b:34028)
- Ljubiškin, V. A. Calculation of a regularized trace of the Sturm-Liouville operator in the Weyl limit circle case. (Russian. English summary) (82j:34021)
- Sett, Jayasri See Das, Jyoti, (82b:34018)
- 34B25 Spectral theory, Sturm-Liouville, and scattering theory; eigenfunctions, eigenvalues, and expansions [See also 42--XX, 43--XX, 45C05, 47Axx, 47Bxx, 47E05.]
- Adamjan, V. M. (with Pušek, N. S.) A Schrödinger operator with singular attracting potential. (Russian) 82c:34022
- Adygezalov, A. A. On the asymptotics of the negative part of the spectrum of the Sturm-Liouville operator problem. (Russian. Azerbaijani and English summaries) 82j:34019
- Ahlbrandt, Calvin D. (with Hinton, Don B.; Lewis, Roger T.) Necessary and sufficient conditions for the discreteness of the spectrum of certain singular differential operators. 82d:34026
- Allahverdiev, B. P. See Isaev, G. A., 82i:34023
- Amanova, T. T. On the separability of a differential operator. (Russian) 82j:34020
- Anderson, Ronald M. (with Ray, A. K.) Oscillation and comparison theorems for $y'' + \lambda \omega(x)y = 0$. 82h:34021
- Andrew, Alan L. (with de Hoog, Frank R.; Robb, Peter J.) Leighton's bounds for Sturm-Liouville eigenvalues. 82b:34022
- Androščuk, O. O. Uniqueness in an inverse Sturm-Liouville problem with unbounded operator potential. (Russian. English summary) 82h:34019
- Angeletti, A. Antibound states for a class of one-dimensional Schrödinger operators. 82i:34021
- Articolo, G. A. Sturm-Liouville transforms: the finite sine and cosine. 82b:34020
- Atkinson, F. V. Exponential behaviour of eigenfunctions and gaps in the essential spectrum. 82f:34022
- Barkovskii, Ju. S. (with Judovič, V. I.) Spectral properties of a class of boundary value problems. (Russian) 82c:34019
- Beesack, Paul R. Minimum properties of eigenvalues—elementary proofs. 82d:34027
- Benedek, Agnes Ilona (with Panzone, Rafael) ★ On inverse eigenvalue problems for a second-order differential equation with parameter contained in the boundary conditions. 82c:34023
- Birkeland, Bent A singular Sturm-Liouville problem treated by nonstandard analysis. 82i:34022
- Budak, A. B. Expansion in eigenfunctions of a fourth-order differential operator with a piecewise constant leading coefficient. (Russian) 82b:34027
- Some properties of eigenfunctions of a fourth-order differential operator with discontinuous coefficients. (Russian) 82c:34024
- Carlson, Robert (with Varley, Robert) Grassmannian subvarieties arising in the spectral theory of ordinary differential operators. 82c:34020
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- Singh, Surya Narain See Hussain, M. A., (82m:33008)

- Sheeman, B. D. Multiparameter periodic differential equations. (82c:34035)
 Trubowitz, E. See Deift, P. (82g:34022)

34B99 None of the above, but in this section

- Wiener, Klaus Über ein Randwertproblem bei Differentialgleichungen von nichtganzzahliger Ordnung. 82c:34028

secondary classifications:

- Gerdjikov, V. S. (with Hristov, E. H.) Product expansions of solutions of two Dirac systems. (Russian) (82e:81006)
 Hristov, E. H. See Gerdjikov, V. S., (82e:81006)
 Kamimaga, Takashi A variation of Kneser's theorem and boundary value problems. (82b:34010)
 Paladii, Basudeb Ray The inverse problem associated with a pair of second-order differential equations. (82b:34015)

34Cxx Qualitative theory

- (Kolesov, Ju. S.) See Studies in stability and the theory of oscillations, 82c:34029
 Mees, Alistair I. ★ Dynamics of feedback systems. 82b:34033
 Stability ★ Исследования по устойчивости и теории колебаний. (Russian) [Studies in stability and the theory of oscillations] 82c:34029
 Studies in stability and the theory of oscillations ★ Исследования по устойчивости и теории колебаний. (Russian) [Studies in stability and the theory of oscillations] 82c:34029
 Theory of oscillations ★ Исследования по устойчивости и теории колебаний. (Russian) [Studies in stability and the theory of oscillations] 82c:34029

secondary classifications:

- (Burns, John A.) See Reid, William T., (82f:34002)
 (Gaines, Robert E.) See Rouche, N.; et al., (82c:34001)
 Kozlov, V. V. ★ Методы качественного анализа в динамике твердого тела. (Russian) [Methods of qualitative analysis in the dynamics of a rigid body] (82e:70002)
 Mawhin, Jean See Rouche, N., (82c:34001)
 Reid, William T. ★ Sturmian theory for ordinary differential equations. (82f:34002)
 Rouche, N. (with Mawhin, Jean) ★ Ordinary differential equations. (82c:34001)

34C05 Location of integral curves, singular points, limit cycles

- Abramov, A. A. On the behaviour of boundary conditions moved to the neighborhood of a regular singular point. (Russian) 82b:34032
 Artykov, A. R. (with Rabinov, G. A.) Investigation of movable singular points by the method of the qualitative theory of differential equations. (Russian) 82c:34030
 Ashkenazi, Max (with Chow, Shui Nee) A Hopf's bifurcation theorem for nonsimple eigenvalues. 82b:34026
 Belevce, P. S. (with Valeeva, R. T.) A class of dynamic systems with an algebraic limit cycle. (Russian) 82c:34030
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 Brjuno, A. D. ★ Локальный метод нелинейного анализа дифференциальных уравнений. (Russian) [A local method of nonlinear analysis for differential equations] 82b:34033
 Bulgakov, V. I. The existence of homoclinic trajectories in an autonomous three-dimensional system of differential equations. (Russian. English summary) 82b:34034
 Butenina, N. N. Multiple merging of separatrices and limit cycles. (Russian) 82f:34030
 Čerkaš, L. A. Structure of the sequence function in the neighborhood of a separatrix cycle during perturbation of an analytic autonomous system on the plane. (Russian) 82c:34029
 Two remarks with respect to conditions for a center. (Russian) 82m:34028
 Cheng, Kuo Shun Uniqueness of a limit cycle for a predator-prey system. 82b:34035
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 Curtz, Paul Stabilité locale des systèmes quadratiques. 82b:34034
 Dulac, H. ★ О предельных циклах. (Russian) [On limit cycles] 82c:34031
 Erle, Dieter Nonuniqueness of stable limit cycles in a class of enzyme catalyzed reactions. 82c:34030
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 Husanov, B. See Šaripov, Š. R.; et al., 82b:34034
 Ivanov, B. F. On the question of the existence of closed trajectories in the neighborhood of a homoclinic curve. (Russian) 82c:34027
 Kadyrov, A. See Latipov, H. R., (See 82b:70002b)
 Karandava, R. N. Solution of the problem of the center and focus of a class of implicitly given homogeneous differential equations. (Russian) 82b:34036
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 Knežević, Julka Singular points and periodic solutions of differential equations. (Serbo-Croatian. Russian summary) 82c:34032
 Kovalevskii, M. A. Finding the connection between two fundamental sets of solutions of an ordinary differential equation. (Russian. English summary) 82f:34031
 Kozadzev, V. S. Simple partitions. (Russian) 82b:34036a
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 Latipov, H. R. (with Kadyrov, A.) Investigation of a system of four ordinary differential equations. (Russian) (See 82b:70002b)
 ★ Метод интегральных поверхностей для исследования поведения характеристик в окрестности состояния равновесия. (Russian) [The method of integral surfaces for investigating the behavior of characteristics in the vicinity of an equilibrium state] 82b:34033
 Li, Bing Xi On the uniqueness and stability of limit cycle for negative feedback cellular control system. (Chinese) 82c:34031
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 (Otrokov, N. F.) See Dulac, H., 82b:34031
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 Sanders, Jan A. Asymptotic approximations on arbitrary time scales for systems with a limit-cycle. (See 82b:70002b)
 Santoro, Paolo Contributions to the study of the center for nonlinearizable autonomous differential equations. (Italian) 82b:34040
 Šaripov, Š. R. (with Husanov, B.; Mamalev, S. H.) On some questions of the trajectories of an n -dimensional generally homogeneous differential system. (Russian) 82b:34034
 Schuster, Peter (with Sigmund, Karl; Wolff, Robert) Dynamical systems under constant organization. III. Cooperative and competitive behavior of hypercycles. 82b:34035b
 See also Hofbauer, Josef; et al., 82b:34035a
 Selgrade, James F. Asymptotic behavior of solutions to multiple loop positive feedback systems. 82b:34035
 Sigmund, Karl See Hofbauer, Josef; et al., 82b:34035a and Schuster, Peter; et al., 82b:34035b
 (Šilovaja, G. I.) See Dulac, H., 82b:34031
 Stepanova, T. V. Representations of TO -solutions of the equation $X(x, y)dy = Y(x, y)dx$ in the quasianalytic case. (Russian) 82c:34032
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 Valeeva, R. T. See Belevce, P. S., 82c:34030 and Belevce, P. S., 82m:34027
 Vainova, E. V. Construction of a system of differential equations having given closed curves as cycles and given points as equilibrium states. (Russian) 82c:34031
 Wang, Ming Shu See Wang, Xian, 82c:34035
 Wang, Xian (with Wang, Ming Shu) Qualitative analysis of a total differential equation having critical points. (Chinese. English summary) 82c:34035
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 Žukov, V. P. Investigation of periodic modes in nonlinear systems. (Russian) 82f:34032

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- Ablowitz, Mark J. (with Ramani, A.; Segur, Harvey) A connection between nonlinear evolution equations and ordinary differential equations of P -type. I. (82i:35148a)
 Atherton, Derek P. ★ Stability of nonlinear systems. (82i:93049)
 Bell, Jonathan See Pinsker, Harold M., (82b:92020)
 Benoit, Eric Tunnels et entonnoirs. (English summary) (82g:58074)
 Bittrich, Hans-Joachim See Viehweger, Uwe; et al., (82b:68133)
 Bureau, F. J. Sur un système d'équations différentielles non linéaires. (82c:34007)
 Ceschia, Mario (with Zecchin, Giuliano) Asymptotic amplitudes from a three-parameter oscillator. (82e:58083)
 Chen, Yi Yuan Qualitative theory of differential equations on the projective plane. (Chinese. English summary) (82k:58071)
 Chen, Zao Ping Topological structure of orbits of differential equations on the torus with one singular point. (Chinese) (82k:58072)
 Erugin, N. P. Behavior of solutions of a linear homogeneous system of differential equations in the neighborhood of a singular point. (Russian) (82k:34013)
 van den Essen, Arno Reduction of singularities of the differential equation $Ady = Bdx$. (82m:34007)
 Georgiev, Neko N. Investigation of a third-order nonlinear differential system. (Russian) (82k:34047)
 González-Gascón, F. Limit cycles are not incompatible with conservative systems. (82b:58035)
 Limit cycles and symmetries of dynamical systems. (82e:58084)
 González Mastrapa, H. See Žernolenko, V. N., (82c:49030)
 Hippe, Lutz See Viehweger, Uwe; et al., (82b:68133)
 Hofbauer, Josef (with Schuster, Peter; Sigmund, Karl) Competition and cooperation in catalytic self-replication. (82b:92062)
 Kuo, Tzee Char On an ODE problem for equisingularities. (82f:58021)
 Kuz'min, A. G. Behavior of the integral curves of a first-order equation in a neighborhood of an isolated discriminant point. (Russian. English summary) (82j:58091)

- Luo, Ding Jun. See Ye, Yan Qian, (82c:58078)
- Matsumura, Toshio (with Sakawa, Yoshiyuki) Nonlinear analysis of nitrogen cycle in aquatic ecosystems. (82g:92052)
- Merenkov, Ju. N. Investigation of a complex singular point of a differential system by the blow-up method. (Russian) (82i:58049)
- Merrill, Stephen J. Limit cycles in a model of B-cell stimulation. (82b:92005)
- Mira, Christian Singularités non classiques d'une récurrence, et d'une équation différentielle d'ordre 2. (English summary) (82g:58067)
- Morioka, N. See Shimizu, Toshihiro, (82c:58043)
- Pinsker, Harold M. (with Bell, Jonathan) Phase plane description of endogenous neuronal oscillators in *Aplysia*. (82b:92020)
- Pitcher, Everett Counting compatible boundary conditions. (82c:58029)
- Ramani, A. See Ahlowitz, Mark J.; et al., (82i:35148a)
- Sakawa, Yoshiyuki See Matsumura, Toshio, (82g:92052)
- Schäffe, Reinhard (with Schmidt, Dieter) The connection problem for general linear ordinary differential equations at two regular singular points with applications in the theory of special functions. (82a:34010a)
- Schmidt, Dieter See Schäffe, Reinhard, (82a:34010a)
- Schuster, Peter See Hofbauer, Josef; et al., (82b:92062)
- Segur, Harvey See Ahlowitz, Mark J.; et al., (82i:35148a)
- Shi, Song Ling On limit cycles of plane quadratic systems. (82j:58101)
- Shimizu, Toshihiro (with Morioka, N.) On the bifurcation of a symmetric limit cycle to an asymmetric one in a simple model. (82c:58043)
- Sibuya, Yasutaka A linear Pfaffian system at an irregular singularity. (82b:13019)
- Sigmund, Karl See Hofbauer, Josef; et al., (82b:92062)
- Tessmann, Hans-Jürgen See Viehweger, Uwe; et al., (82b:68133)
- Viehweger, Uwe (with Hippe, Lutz; Tessmann, Hans-Jürgen; Bittrich, Hans-Joachim) Zur Modellierung oszillierender Reaktionssysteme am Analogrechner. (82b:68133)
- Xu, Shi Long A note on Perko's Theorem B. (82f:58075)
- Ye, Yan Qian (with Luo, Ding Jun) Qualitative investigation of a toral differential equation having critical points. (Chinese summary) (82c:58078)
- Zecchin, Giuliano See Ceschia, Mario, (82c:58083)
- Žemolienko, V. N. (with González Mastrapa, H.) On the limit cycle in the problem of maximal deviation of a second-order system. (Spanish) (82c:49030)
- 34C10 Zeros, disconjugacy, oscillation and comparison of solutions
- Abdel Karim, Rahmi Ibrahim Ibrahim On the distribution of zeros of the solutions of certain quasilinear differential equations of the third order. (Arabic summary) (82a:34029)
- Ahlbrandt, Calvin D. (with Hinton, Don B.; Lewis, Roger T.) The effect of variable change on oscillation and disconjugacy criteria with applications to spectral theory and asymptotic theory. (82g:34031)
- Ahmad, Shair (with Lazer, Alan C.) On an extension of the Sturm comparison theorem. (82a:34030)
- Atkinson, F. V. (with Grimmer, R. C.; Patula, William T.) Nonoscillatory solutions of forced second-order linear equations. II. (82c:34032)
- Bartusek, M. Properties of oscillating solutions of two-dimensional differential systems. (Russian. Georgian and English summaries) (82i:34033)
- On the properties of oscillating solutions of third-order ordinary differential equations. (Russian) (82g:34032)
- Barvinek, Erich Linear differential transformations of the 2nd order as a representation of an abstract model. (82c:34036)
- Bresquar, Anna Maria On some oscillation criteria for second-order linear differential equations. (Italian. English summary) (82a:34037)
- Čanturija, T. A. Comparison theorems for systems of ordinary differential equations. (Russian. Georgian and English summaries) (82c:34037)
- Comparison theorems of Sturm type for high-order differential equations. (Russian. Georgian and English summaries) (82a:34031)
- On an asymptotic representation of oscillating solutions of an Emden-Fowler type equation. (Russian) (82g:34033)
- Cassell, J. S. The asymptotic behaviour of a class of linear oscillators. (82b:34041)
- Čertorický, Ju. A. A comparison theorem for second-order linear nonautonomous systems. (Russian) (82a:34032)
- Chen, Lu San Some remarks on oscillation of second order differential equations. (Italian summary) (82c:34032)
- Cheng, Sui Sun Oscillatory structure of the solution space of a pair of second order differential equations. (82b:34042)
- On a class of fourth order half-linear differential equations. (82a:34033)
- Deptula, Elzbieta On the convergence of solutions of a second order nonlinear differential equation. (82g:34034)
- Edelson, Allan L. Conjugate and focal points of nonlinear equations. (82b:34039)
- Elbert, A. On solutions of linear second order differential equations. (82c:34038)
- El-Owaidy, Hassan On oscillation of second order differential equations. (82b:34043)
- Erbe, L. Comparison theorems for second order nonlinear differential equations. (82a:34034)
- Fiedler, Frank Hinreichende Oszillationskriterien für gewöhnliche Differentialoperatoren höherer Ordnung. (82a:34035)
- Filová, Adela Eine Bemerkung über die Nullstellen der Lösungen der quasilinearen Differentialgleichungen 4. Ordnung. (Slovak and Russian summaries) (82g:34035)
- Gera, Milan On the dimension of subsets of solutions of a third-order differential equation. (Russian. English and Slovak summaries) (82g:34036)
- Gingold, H. Uniqueness criteria for second order nonlinear boundary value problems. (82a:34038)
- Grace, S. R. (with Lalli, B. S.) Oscillation theorems for certain second order perturbed nonlinear differential equations. (82d:34039)
- Grassman, J. ★On the van der Pol relaxation oscillator with a sinusoidal forcing term. (82c:34041)
- Greguš, Michal Bands of solutions of a differential equation of the third order with continuous coefficients and their application. (Slovak and Russian summaries) (82f:34033)
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- Gutowski, Roman Investigation of the behavior of the solutions of nonlinear differential equations of motion by means of integral inequalities. (Russian. English summary) (82b:34040)
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- Hinton, Don B. (with Lewis, Roger T.) Oscillation theory for generalized second-order differential equations. (82c:34039)
- See also Ahlbrandt, Calvin D.; et al., (82g:34031)
- Izjumova, D. V. (with Torošelidze, I. A.) Oscillation theorems for some second-order nonlinear ordinary differential equations. (Russian. Georgian and English summaries) (82g:34037)
- Jones, Gary D. An ordering of oscillation types for $y^{(n)} + py = 0$. (82d:34040)
- An ordering of oscillation types for $y^{(n)} + py = 0$. (82a:34036)
- Kamenev, I. V. V. A Kondrat'ev's theorem on the distribution of zeros of solutions of a second-order linear differential equation. (Russian) (82c:34033)
- Kim, W. J. Asymptotic properties of nonoscillatory solutions of higher order differential equations. (82b:34044)
- Disfocality and nonoscillatory solutions of n th-order differential equations. (82f:34035)
- Kreith, Kurt Oscillation properties of weakly nonlinear differential equations. (82d:34041)
- Kusano, Takasi (with Naito, Manabu) Oscillation criteria for general linear ordinary differential equations. (82g:34038)
- Lalli, B. S. See Grace, S. R., (82d:34039)
- Lazer, Alan C. See Ahmad, Shair, (82a:34030)
- Lewis, Roger T. (with Wright, Lynne C.) Comparison and oscillation criteria for selfadjoint vector-matrix differential equations. (82b:34041)
- See also Hinton, Don B., (82c:34039) and Ahlbrandt, Calvin D.; et al., (82g:34031)
- Lovely, David Lowell Asymptotic analyses of two fourth order linear differential equations. (82a:34037)
- McCann, Roger C. On the oscillation of solutions of forced even order nonlinear differential equations. (82j:34027)
- Mingarelli, Angelo B. An oscillation criterion for second-order selfadjoint differential systems. (82b:34042)
- On a conjecture for oscillation of second-order ordinary differential systems. (82j:34028)
- Müller-Pfeiffer, Erich Existence of conjugate points for second and fourth order differential equations. (82m:34029)
- Naito, Manabu See Kusano, Takasi, (82g:34038)
- Parhi, N. On oscillatory solutions of a forced second order nonlinear differential equation. (Italian summary) (82g:34039)
- Patula, William T. See Atkinson, F. V.; et al., (82i:34032)
- Popa, Emil Sur quelques critères d'oscillation pour les équations différentielles linéaires du second ordre. (82b:34045)
- Sakata, Sadahisa (with Yamamoto, Minoru) On the boundedness and the attractivity properties of nonlinear second order differential equations. (82c:34040)
- Selgrade, James F. Asymptotic behavior of solutions to single loop positive feedback systems. (82a:34038)
- Shalljaho, Č. A. Comparison theorems for systems of ordinary differential equations. (Russian. Georgian and English summaries) (82m:34030)
- On some comparison theorems for systems of differential equations of Emden-Fowler type. (Russian. Georgian and English summaries) (82m:34031)
- Oscillatory and nonoscillatory nature of solutions of a two-dimensional system of nonlinear differential equations. (Russian) (82b:34037)
- On the oscillatory nature of solutions of some two-dimensional systems of differential equations. (Russian) (82c:34038)
- Sherman, Thomas L. Zeros of cross products of solutions for second-order equations. (82j:34029)
- Smith, H. L. A note on disconjugacy for second order systems. (82d:34042)
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- Spigler, Renato A generalization of the theorem of A. C. Dixon. (Italian. English summary) (82d:34043)
- Spikes, Paul W. (with Smith, Wanda W.) Some asymptotic properties of the solutions of perturbed nonlinear differential equations. (82a:34039)
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- Tanaka, Kyoko Asymptotic analysis of odd order ordinary differential equations. (82c:34040)
- Tatariewicz, Krzysztof Sur les équations oscillantes non nécessairement linéaires. (82b:34046)
- Taylor, W. E., Jr. On the oscillation of a fourth order differential equation and its adjoint. (82j:34030)
- Tomastik, E. C. Conjugate and focal points of second-order differential systems. (82g:34040)
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- Trench, William F. An oscillation condition for differential equations of arbitrary order. (82j:34031)
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- Abdel Karim, Rahmi Ibrahim Ibrahim Fundamental properties of the solutions of quasilinear differential equations of the fifth order. (82b:34003)

- Anderson, Ronald M. (with Ray, A. K.) Oscillation and comparison theorems for $y'' + \lambda a(x)y = 0$. (82c:34021)
- Bank, Steven B. (with Laine, Ilpo) On the oscillation theory of $f'' + Af = 0$ where A is entire. (82c:34005)
- Biernacki, Radosław M. (with Dymowski, Stanisław) A formalization of conditions for the realizability of RC three-poles. (Polish. Russian and English summaries) (82d:94049)
- Chow, Shui Nee (with Kurtz, J. C.) Singular nonlinear equations on an unbounded interval. (82f:58027)
- Domskaja, N. V. (with Norkin, S. B.) Behavior of solutions of a homogeneous initial problem for second-order differential equations with retarded argument in the neighborhood of a singular point. (Russian) (82c:34094)
- Dymowski, Stanisław See Biernacki, Radosław M., (82d:94049)
- Graef, John R. (with Spikes, Paul W.) On the asymptotic behavior of solutions of second order nonlinear delay equations. (82g:34098)
- Grammatikopoulos, Myron K. (with Kulenović, Mustafa) On the nonexistence of L^2 -solutions of n th order differential equations. (82c:34004)
- See also Kulenović, Mustafa, (82c:34014)
- Gricai, A. G. See Ševelo, V. M.; et al., (82j:34075)
- Krbíř, Jaroslav Sequence of second-order strictly and specially nonadjoint linear differential equations. (Russian. Czech and English summaries) (82m:34010)
- Kulenović, Mustafa (with Grammatikopoulos, Myron K.) On the asymptotic behavior of second order differential inequalities with alternating coefficients. (82c:34014)
- See also Grammatikopoulos, Myron K., (82c:34004)
- Kurtz, J. C. See Chow, Shui Nee, (82f:58027)
- Kusano, Takasi (with Naito, Manabu; Tanaka, Kyoko) Oscillatory and asymptotic behaviour of solutions of a class of linear ordinary differential equations. (82c:34040)
- Laforgia, Andrea A monotonic property for the zeros of ultraspherical polynomials. (82j:33016)
- Laine, Ilpo See Bank, Steven B., (82m:34005)
- Moravčík, Jozef A remark on the study of oscillatory properties of the solutions of linear differential systems. (Slovak) (82c:34009)
- Maldowney, James S. On invertibility of linear ordinary differential boundary value problems. (82g:34018)
- Naito, Manabu See Kusano, Takasi; et al., (82c:34040)
- Norkin, S. B. See Domskaja, N. V., (82c:34094)
- Rahimberdiev, M. I. See Sultangazin, U. M., (82d:82050)
- Ray, A. K. See Anderson, Ronald M., (82c:34021)
- Ševelo, V. M. (with Vauh, N. V.; Gricai, A. G.) Investigation of oscillation properties of solutions of systems of differential and differential-difference equations (survey). (Russian) (82j:34075)
- Spikes, Paul W. See Graef, John R., (82g:34098)
- Sultangazin, U. M. (with Rahimberdiev, M. I.) Stability of the equilibrium state of a discrete Boltzmann equation. (Russian. Kazakh summary) (82d:82050)
- Tanaka, Kyoko See Kusano, Takasi; et al., (82c:34040)
- Vauh, N. V. See Ševelo, V. M.; et al., (82j:34075)
- Yee, John A nonlinear, second-order population model. (82e:92043)

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- Afuwape, Anthony Uyi On the convergence of solutions of certain fourth order differential equations. 82j:34032
- Atkinson, F. V. Asymptotics of certain nonlinear oscillatory ordinary differential equations. (See 82c:70002a)
- Cartwright, Mary L. (with Swinerton-Dyer, H. P. F.) Boundedness theorems for some second-order differential equations. IV. (Russian) 82g:34041
- Coletti, Giulianella The existence of bounded solutions for nonlinear ordinary differential equations. (Italian. English summary) 82c:34039
- Elias, Uri (with Kreith, Kurt) Nonlinear differential systems with monotone solutions. 82f:34038
- Erbe, L. A note on disconjugate differential equations and growth estimates. 82h:34047
- Hara, Tadayuki Further results for the solutions of certain third-order differential equations. 82a:34041
- (with Yoneyama, Toshiaki; Okazaki, Yoshinori) On the boundedness of solutions of perturbed linear systems. 82j:34033
- Ishii, Hiroyuki Asymptotic properties of nonlinear ordinary differential equations. 82c:34035
- Kajumov, T. On the asymptotic behavior of a third-order nonlinear ordinary differential equation. (Russian) 82f:34039
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- Kreith, Kurt See Elias, Uri, 82f:34038
- Kusano, Takasi (with Naito, Manabu; Tanaka, Kyoko) Oscillatory and asymptotic behaviour of solutions of a class of linear ordinary differential equations. 82c:34040
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- Liang, Zhong Chao The asymptotic behavior of solutions of certain nonlinear differential equations of the second order. (Chinese) 82m:34032
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- Mirzov, D. D. Some asymptotic properties of solutions of a nonlinear differential system. (Russian) 82g:34042
- Naito, Manabu See Kusano, Takasi; et al., 82c:34040
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- Okazaki, Yoshinori See Hara, Tadayuki; et al., 82j:34033
- Pavlovic, Gordana Solution of a first-order differential equation in the neighborhood of a

given function and the stability of the solution of this equation. (Serbo-Croatian. French summary) 82g:34043

- Polskiński, Z. On some ordinary differential equations. 82m:34033
- Rovder, Jozef Asymptotic behaviour of solutions of the differential equation of the fourth order. (Russian summary) 82a:34042
- Sakata, Sadahisa (with Yamamoto, Minoru) Further results on the boundedness and the attractivity properties of nonlinear second order differential equations. 82i:34037
- Sepeleva, R. P. Critical frequencies of canonical systems, invariant with respect to time reversal, with periodic coefficients. (Russian) 82h:34043
- Skrzyp, W. A. (with Lalli, B. S.) On the boundedness and stability of a fourth-order differential equation. 82a:34043
- Strelitz, Shlomo On the growth of solutions of second order algebraic differential equations. 82d:34045
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- Tanaka, Kyoko See Kusano, Takasi; et al., 82c:34040
- Yamamoto, Minoru See Sakata, Sadahisa, 82i:34037
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- Atkinson, F. V. (with Grimmer, R. C.; Patula, William T.) Nonoscillatory solutions of forced second-order linear equations. II. (82j:34032)
- Bartusiek, M. On the properties of oscillating solutions of third-order ordinary differential equations. (Russian) (82g:34032)
- Bobrowski, Dobiesław (with Wyrwińska, Aleksandra) Asymptotic behaviours of square integrable solutions of a certain differential equation. (82h:34063)
- Čanturija, T. A. Comparison theorems of Sturm type for high-order differential equations. (Russian. Georgian and English summaries) (82a:34031)
- Falerm, Melvin Bounds for the eigenfunctions of a two-parameter system of ordinary differential equations of the second order. (82f:34024)
- Gollub, J. P. (with Romer, E. J.; Socolar, J. E.) Trajectory divergence for coupled relaxation oscillators: measurements and models. (82d:58043)
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- Hsu, Sze Bi See Waltman, Paul; et al., (82m:92079)
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- Hylian, Jaroslav Asymptotic properties of solutions of a class of second-order linear differential equations. (Czech) (82d:34013)
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- Strelitz, Shlomo A remark on the growth of solutions of first order algebraic differential equations. (82a:34005)
- Tanaka, Kyoko Asymptotic analysis of odd order ordinary differential equations. (82c:34040)
- Waltman, Paul (with Hubbell, Stephen P.; Hsu, Sze Bi) Theoretical and experimental investigations of microbial competition in continuous culture. (82m:92079)
- Wyrwińska, Aleksandra See Bobrowski, Dobiesław, (82h:34063)
- Zaharov, A. A. Some properties of solutions of the Riccati equation with almost periodic coefficients. (Russian) (82g:34056)

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- Benson, Donald C. Principal solutions for Liénard's equation. 82j:34034
- Burton, Thomas D. A time transformation method for analysis of periodic nonlinear systems. 82h:34044
- Černyšenko, S. I. An energy condition for generating auto-oscillations. (Russian. English summary) 82a:34044
- Choe, Gyu Hyok Some analytic methods for solving the problems of linear systems with variable parameters of forced vibrations. (Korean. English summary) 82a:34045
- Gnoenskil, L. S. Estimates of natural oscillations in linear follow-up systems with incomplete parameter information. 82c:34041
- Grumondz, V. T. Investigation of oscillations in nonlinear mechanical systems of arbitrary order. 82i:34038
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- Itoh, Makoto See Koga, Tosihiro, (See 82e:94002)
- (Kisun, V. I.) See Starzhinskii, V. M., 82f:34042
- Koga, Tosihiro (with Itoh, Makoto) Synthesis of a nonlinear system having an arbitrarily prescribed smooth Jordan curve as its stable limit cycle. (See 82e:94002)
- Kolomeiev, V. G. Some remarks on linearization methods in the theory of nonlinear oscillations. (Russian) 82i:34039
- Mathur, Renu See Munot, P. C., 82c:34042
- Mirzov, D. D. The oscillatory nature of the solutions of a nonlinear differential system of Emden-Fowler type. (Russian) 82a:34046
- Oscillatory nature of the solutions of a differential system. (Russian) 82k:34042
- Mitropolskii, Ju. A. (with Strizak, T. G.) On the motions of a mathematical pendulum. (Russian) 82g:34044
- Mittal, A. K. (with Gupta, D. P.) A note on application of Struble's method to van der Pol type oscillators. 82d:34046
- Month, L. A. (with Rand, R. H.) An application of the Poincaré map to the stability of nonlinear normal modes. 82a:34047

- Munot, P. C. (with Mathur, Renu) On nonlinear oscillation problem. **82c:34042**
- Nguyễn Văn Đạo Nonlinear oscillations of third order systems. I. Autonomous systems. (Russian and Polish summaries) **82m:34035a**
- Nonlinear oscillations of third order systems. II. Nonautonomous systems. (Polish and Russian summaries) **82m:34035b**
- Nonlinear oscillations of the third order systems. III. Parametric oscillation. (Polish and Russian summaries) **82m:34035c**
- Pyžkova, N. V. Solution of the problem of isochronism of the center for a system of nonlinear oscillations. (Russian) **82f:34041**
- Rand, R. H. See Month, L. A., **82a:34047**
- Rjabov, Ju. A. Application of bounded operators and Lyapunov's majorizing equations to the analysis of differential equations with a small parameter. **82m:34036**
- Sarkov'skii, O. M. Oscillations described by autonomous difference and differential-difference equations. (Russian) (See **82k:70002b**)
- Saryčev, V. A. See Zlatoustov, V. A.; et al., **82h:34048**
- Sazonov, V. V. See Zlatoustov, V. A.; et al., **82h:34048**
- Scheurle, Jürgen Über die Konstruktion invarianter Tori, welche von einer stationären Grundlösung eines reversiblen dynamischen Systems abzweigen. (English summary) **82e:34038**
- Schneider, K. R. Andronov-Hopf-Bifurkation im Falle stetiger Parameterabhängigkeit. (English and Russian summaries) **82a:34048**
- Seregin, V. N. See Veretennikov, V. G., **82g:34045**
- Smoes, Marie-Luce The autonomous Bautin system and some nonautonomous applications to chemical oscillations. **82a:34049**
- Staržinskii, V. M. ★Applied methods in the theory of nonlinear oscillations. **82f:34042**
- Strizak, T. G. See Mitropolskii, Ju. A., **82g:34044**
- Tondl, A. The effect of spring nonlinearities in a self-excited system with a tuned absorber. (See **82k:70002b**)
- Vanderbauwhede, A. Symmetry and bifurcation near families of solutions. **82a:34050**
- Veretennikov, V. G. (with Seregin, V. N.) On the investigation of oscillations of quasilinear systems with almost-periodic coefficients. **82g:34045**
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- Apyhtin, N. G. Oscillations of a solid about the permanent steady-state rotations. **(82g:70017)**
- Atherton, Derek P. See Rao, U. M., **(82g:93030)**
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- Brumer, Paul See Jaffé, Charles, **(82b:81145)**
- Čanturija, T. A. On an asymptotic representation of oscillating solutions of an Emden-Fowler type equation. (Russian) **(82g:34033)**
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- De Castro, Ercole On the mutual synchronization of a set of coupled oscillators. Considerations on the effect of pacemakers on cardiac cells. (Italian) **(82h:92006)**
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- Escher, C. Global stability analysis of open two-variable quadratic mass-action systems with elliptical limit cycles. **(82c:80021)**
- Fedorov, E. L. See Morozov, A. D., **(82c:58075)**
- Feigin, M. I. On the structure of C-bifurcation boundaries of piecewise-continuous systems. **(82h:58032)**
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- Karney, Charles F. F. Velocity-space diffusion in a perpendicularly propagating electrostatic wave. **(82g:76048)**
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- Lalli, B. S. See Grace, S. R., **(82d:34039)**
- Landau, Mayer (with Valentini, Françoise A.) Formalisation mathématique de la contraction musculaire squelettique. (English summary) **(82h:92016)**
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- Linkens, D. A. Biological systems. **(82d:92002)**
- Maršakov, L. M. Examples of approximate investigation of the neighborhood of stationary modes of oscillating mechanical systems with a small parameter. **(82g:70047)**
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- Morozov, A. D. (with Fedorov, E. L.) On auto-oscillations in two-dimensional near-Hamiltonian dynamic systems. **(82k:58075)**
- Nicholson, David W. Bounds on the forced response of damped linear systems. **(82b:70007)**
- Obi, Chike Analytical theory of nonlinear oscillations. X. Some classes of equations $x + g(x) = 0$ with no finite Fourier series solution. (Italian summary) **(82j:34039)**
- Persek, Stephen C. Hierarchies of iterated averages for systems of ordinary differential equations with a small parameter. **(82d:34056)**
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- Rand, R. H. (with Holmes, Philip J.) Bifurcation of periodic motions in two weakly coupled van der Pol oscillators. (French and German summaries) **(82g:58057)**
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- Ahlbrandt, Calvin D. Equivalence of differential operators. **82f:34043**
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- Ihsanov, E. V. Normal form of a class of periodic systems. (Russian) **82h:34049**
- Lisjanov, V. F. The normal form of nonautonomous systems. (Russian) **82m:34037**
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- Classifications of two-dimensional homogeneous cubic differential equation systems. II. **82k:34043b**
- Palmer, Kenneth J. Reducibility of almost periodic linear systems. **82f:34044**
- Piljulina, V. B. On a system with a triple zero root of the characteristic equation. I. (Russian) **82m:34039**
- Pyžkova, N. V. (with Sadovskii, A. P.) A method for solving the problem of isochronism of the center. (Russian) **82d:34047**
- Reinfeld, A. A. Dynamic equivalence of differential equations in the neighborhood of an invariant manifold. (Russian) **82h:34051**
- Sadovskii, A. P. An elementary proof and applications of a theorem of F. Takens. (Russian) **82m:34040**
- See also Pyžkova, N. V., **82d:34047**
- Šakirova, Ju. S. Equivalence of equations with periodic coefficients in the neighborhood of a degenerate singular point. (Russian) **82m:34041**
- Smereka, I. P. Stationary oscillation processes in essentially nonlinear autonomous systems excited by instantaneous forces. (Russian) **82g:34047**
- Staněk, Svatoplav Phase and dispersion theory of the differential equation $y'' = q(t)y$ in connection with the generalized Floquet theory. **82h:34045**
- On the dispersion structure of the differential equation $y'' = q(t)y$ having in the generalized Floquet theory the same characteristic multipliers. (Czech and Russian summaries) **82h:34046**
- On an application of the generalized Floquet theory to the transformation of the equation $y'' = q(t)y$ into its associated equation. (Czech and Russian summaries) **82h:34047**
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- Tóth, Gábor On the triangularizability of planar differential systems without critical points. **82h:34042**
- Vřek, Vladimír On transformations of bundles of solutions of a fourth order iterated linear differential equation. (Czech and Russian summaries) **82m:34043**
- Vulpe, N. I. A polynomial basis of center-affine comitants of a differential system. (Russian) **82c:34039**

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- Brjuno, A. D. ★Локальный метод нелинейного анализа дифференциальных уравнений. (Russian) [A local method of nonlinear analysis for differential equations] (82b:34033)
- Fedešenko, S. F. See Sotnikenko, M. A., (82i:34008)
- Giaro, André (with Kumpera, Antonio; Ruiz, Ceferino) Sur la lecture correcte d'un résultat d'Élie Cartan. (English summary) (82b:58006)
- Gil'derman, Ju. I. See Volokitin, E. P., (82b:58023)
- Gingold, H. Dichotomies and moving singularities. (82i:34050)
- González-Gascón, F. On a certain conjecture by Lutzky. (82b:58036)
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- Kojčák, Jitka On some properties of functions relative to the classes of certain factor spaces. (Czech and Russian summaries) (82a:34008)
- Kumpera, Antonio See Giaro, André; et al., (82b:58006)
- Lišanov, V. F. Formal classification of nonautonomous periodic systems. (Russian. English summary) (82i:58060)
- Neuman, František On transformations of differential equations and systems with deviating argument. (82c:34074)
- Ruiz, Ceferino See Giaro, André; et al., (82b:58006)
- Schecter, Stephen (with Singer, Michael F.) Separatrices at singular points of planar vector fields. (82c:58075)
- Singer, Michael F. See Schecter, Stephen, (82c:58075)
- Sotnikenko, M. A. (with Fedešenko, S. F.) On the question of integration of systems of differential equations. (Russian) (82i:34008)
- Tóth, Gábor On a transformation problem of autonomous differential systems from stability theoretical viewpoint. (82a:58062)
- Volokitin, E. P. (with Gil'derman, Ju. I.) Realization of flows by continuous piecewise-affine systems. (Russian) (82c:58023)
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- (with Kirnickaja, È. F.) Centroaffine invariants of a differential system with cubic nonlinearities. (Russian) (82c:53033)
- ### 34C25 Periodic solutions
- Amaral, Luis (with Pera, Maria Patrizia) A note on periodic solutions at resonance. (Italian summary) (82c:34044)
- Amato, M. A. Periodic solutions of a nonlinear system. (Russian) (82c:34045)
- Andersen, Kurt Munk See Sandqvist, Allan, 82a:34055 and 82f:34046
- Aris, Rutherford See Kennedy, Clinton R., 82b:34053
- Balbi, J.-H. Quasiperiodic solutions of quasiperiodic differential equations. (82c:34040)
- Beleckii, V. V. (with Kasatkin, G. V.) Extremal properties of resonance motions. (Russian) (82c:34041)
- Beljarskii, S. S. Periodic permutational solutions of two systems of differential equations. (Russian) (82b:34052)
- Bononcini, Vittorio E. Periodic solutions of differential equations of the form $x^{(n)} = f(t, x)$. (Italian. English summary) (82c:34046)
- Božko, A. E. (with Permyakov, V. I.) On the determination of periodic solutions by the method of Taylor transforms. (Russian. English summary) (82j:34036)
- Brodovskii, V. G. Periodic solutions of a system of differential equations. (Russian) (82b:34049)
- Burkina, L. I. (with Leonov, G. A.) Frequency conditions for the existence of limit cycles of the first kind in phase systems. (Russian) (82d:34048)
- Černyšev, V. E. Closed trajectories in the neighborhood of an invariant torus. (Russian) (82c:34052)
- Chen, Xiang Yan Criteria for absence of closed trajectories of two-dimensional autonomous systems. (Chinese. English summary) (82i:34041)
- Cidilo, K. V. (with Gul'ka, S. S.) Periodic solutions of nonlinear systems with impulse action. (Russian. English summary) (82m:34044)
- Contopoulos, G. (with Michaelidis, P.) Bifurcations of triple-periodic orbits. (82b:34050)
- Dai, Lo Sheng On the existence of limit cycles for the enzyme-catalyzed hydrolysis reaction in a zero-dimensional representation of a membrane. (82b:34051)
- Dobelis, K. Ž. Behavior of trajectories in the conic neighborhood of an exceptional cylinder. (Russian) (82i:34042)
- Dražbek, Pavel Remarks on multiple periodic solutions of nonlinear ordinary differential equations. (82a:34053)
- Du, Bao Sen A note on periodic solutions in the vicinity of a center. (82c:34042)
- El-Owaidy, Hassan On stability of derivo-periodic solutions of nonholonomic systems. (82g:34048)
- Emamirad, Hassan Ali See Mehri, B., 82d:34050
- Eremenko, V. A. Periodic solutions of nonlinear differential equations with a small parameter multiplying the derivatives. (Russian) (82g:34049)
- Ermentrout, G. Bard $n:m$ phase-locking of weakly coupled oscillators. (82j:34037)
- Ezeilo, James O. C. (with Tejumola, Haroon O.) Periodic solutions of a certain fourth order differential equation. (Italian summary) (82c:34053)
- Filipov, V. F. A qualitative study of a two-dimensional autonomous system with two partial integrals in the form of algebraic curves. (Russian. English summary) (82c:34043)
- Galaktionova, O. O. (with Zlatoustov, V. A.) 2π -periodic solutions of the Duffing equation for small values of the amplitude of the driving force. (Russian) (82g:34050)
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- Georgiev, Neko N. Investigation of a third-order nonlinear differential system. (Russian) (82b:34047)
- Göbber, F. (with Williamowski, K.-D.) Ljapunov approach to multiple Hopf bifurcation. (82b:34052)
- Grozdev, S. I. Periodic oscillations of quasilinear nonautonomous systems in the absence of resonance. (Bulgarian. Russian and English summaries) (82g:34051)
- Gul'ka, S. S. See Cidilo, K. V., 82m:34044
- Gupta, D. P. See Mittal, A. K., 82c:34046
- Ioffe, I. V. (with Leonov, G. A.) Construction of contact-free surfaces in proving the existence of nontrivial periodic solutions of multidimensional dynamical systems. (Russian) (82d:34049)
- Kasatkin, G. V. See Beleckii, V. V., 82c:34041
- Kennedy, Clinton R. (with Aris, Rutherford) Bifurcations of a model diffusion-reaction system. (82b:34053)
- Lapinskii, V. N. An approximate method in the theory of oscillations. (Russian) (82c:34044)
- Leonov, G. A. See Burkina, L. I., 82d:34048 and Ioffe, I. V., 82d:34049
- Levi, Mark Periodically forced relaxation oscillations. (82g:34052)
- Manolov, Spas Autonomous systems with nonglobal internal resonance and a first approximation of period. (Bulgarian. Russian and French summaries) (82b:34054)
- Realization of an algorithm for the construction of periodic trajectories of autonomous systems of a specific class. (Russian) (82c:34048)
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- Mehri, B. On the existence of periodic solution for certain nonlinear differential equation. (82a:34054)
- (with Emamirad, Hassan Ali) On the existence of a periodic solution of n th order nonlinear differential equations. (Italian summary) (82d:34050)
- Periodic solution of certain second order differential equation. (82c:34045)
- Periodic solutions for a certain nonlinear third order differential equation. (82c:34043)
- Periodic solution for certain nonlinear second-order autonomous differential equation. (82g:34053)
- Meyer, Kenneth R. (with Schmidt, D. S.) Entrainment domains. (82j:34038)
- Michaelidis, P. See Contopoulos, G., 82b:34050
- Michel, Anthony N. See Miller, Richard K., 82b:34055
- Miller, Richard K. (with Michel, Anthony N.) Sinusoidal input-periodic response in nonlinear differential equations containing discontinuous elements. (82b:34055)
- Mironenko, V. I. A method that allows one to determine the initial data of periodic solutions of differential systems and to compare the mappings for a period. (Russian) (82d:34051)
- Mittal, A. K. (with Gupta, D. P.) Forced oscillations of a nonlinear equation of Mathieu type. (82c:34046)
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- Otsuki, Tominosuke A family of 2-dimensional Riemannian manifolds joining the non-Euclidean planes. (82i:53016)
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- Wang, Lian See Wang, Mu Qiu; et al., (82a:93043)
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- Johnson, Russell A. Bounded solutions of scalar, almost periodic linear equations. 82k:34052
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- Balbi, J.-H. Quasiperiodic solutions of quasiperiodic differential equations. (82c:34040)
- Defilippi, M. Sur le calcul de la partie principale d'un tore de bifurcation pour un système différentiel périodique. (English summary) (82g:58063)
- Eremenko, V. A. See Kulik, V. L., (82c:34055)
- Fischer, Alexander Existence of almost periodic solutions of systems of linear and quasilinear differential equations with time lag. (Czech summary) (82i:34082)
- Koslowski, Jerry Conditions for self-excitation of almost periodic oscillations in a ferromagnetic two-core circuit with submagnetization. (Polish. Russian and English summaries) (82i:93052)
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- Ueda, Yoshisuke (with Akamatsu, Norio) Chaotically transitional phenomena in the forced negative-resistance oscillator. (82b:58029)

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- Golec', B. I. (with Golec', V. L.; Petrišin, R. I.) On the question of conditionally periodic motions in nonlinear systems. (Ukrainian. English and Russian summaries) 82g:34057

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- Pöschel, Jürgen ★Über invariante Tori in differenzierbaren Hamiltonschen Systemen. (German) [On invariant tori in differentiable Hamiltonian systems] (82c:58023)
- Rand, David A. See Holmes, Philip J., (82c:58073)
- Richens, P. J. (with Berry, M. V.) Pseudointegrable systems in classical and quantum mechanics. (82a:58050)
- Semenov, V. A. See Smirnov, A. I.; et al., (82c:70030)
- Shiraiwa, Kenichi (with Kurata, Masahiro) A generalization of a theorem of Marotto. (82m:58042)
- Shub, Michael See Franks, John, (82i:58049)
- Sinai, Ja. G. (with Vul, E. B.) Discovery of closed orbits of dynamical systems with the use of computers. (82i:58062)
- Smirnov, A. I. (with Fedorov, Ju. A.; Semenov, V. A.) Stability of dynamical systems under periodic unsteady parametric excitation. (Russian) (82c:70030)
- Tresser, C. See Arneodo, A.; et al., (82c:58066)
- Vul, E. B. See Sinai, Ja. G., (82i:58062)
- Winfree, Arthur T. ★The geometry of biological time. (82c:92003)
- Zhang, Zhi Fen (with Ding, Tong Ren; Huang, Wen Zao) Answers to some questions on topological dynamical systems posed by Nemytskii. (82h:58043)
- Ziglin, S. L. Bifurcation of solutions and nonexistence of integrals in Hamiltonian systems. (Russian) (82j:58051)

34C40 Equations and systems on manifolds [See mainly 58Fxx, 58Gxx.]

secondary classifications:

- Brin, Michael On the spectrum of Anosov diffeomorphisms. (82c:58077)
- Chicone, Carmen (with Swanson, R. C.) Spectral theory for linearizations of dynamical systems. (82h:58039)
- Nitecki, Zbigniew H. Recurrent structure of completely unstable flows on surfaces of finite Euler characteristic. (82d:58059)
- Shaw, Robert Strange attractors, chaotic behavior, and information flow. (82k:58069)
- Swanson, R. C. See Chicone, Carmen, (82h:58039)

34C45 Method of integral manifolds

- Al-Amood, Naji See Carr, Jack, 82h:34061
- Carr, Jack (with Al-Amood, Naji) Rate of decay in critical cases. I. Finite-dimensional problems. 82h:34061a
- (with Al-Amood, Naji) Rate of decay in critical cases. II. Infinite-dimensional problems. 82h:34061b
- Schneider, K. R. On the application of integral manifolds to Hopf bifurcation. 82f:34053

34C50 Method of accelerated convergence

34C99 None of the above, but in this section

- Azamov, A. On the number of intersections of solutions of a piecewise linear system with a sewing line. (Russian) 82f:34054
- Bertolino, Milorad Structure de l'intégrale générale des équations différentielles. 82m:34047
- Eminov, M. S. See Maksudov, F. G., 82m:34048
- Maksudov, F. G. (with Eminov, M. S.) On a one-dimensional Schrödinger operator with a nonstandard asymptotic solution at infinity. (Russian. Azerbaijani and English summaries) 82m:34048
- Valeev, K. G. The theory of nonlinear projectors of solutions. (Russian) 82g:34061

secondary classifications:

- Aldridge, John A. See Othmer, Hans G., (82m:92034)
- Grujić, Ljubomir T. Uniquely bounded sets. (82d:34063)

- Hlebopros, R. G. See Isaev, A. S.; et al., (82c:92020)
- Ianiro, N. (with Maffei, C.) On the asymptotic behavior of the solutions of the nonlinear equation $\ddot{x} + h(t, x)\dot{x} + p^2(t)f(x) = 0$. (82h:34074)
- Isaev, A. S. (with Hlebopros, R. G.; Nedorezov, L. V.) The nonlinear theory of the forest insect number dynamics. (82c:92020)
- Maffei, C. See Ianiro, N., (82h:34074)
- Nedorezov, L. V. See Isaev, A. S.; et al., (82c:92020)
- Othmer, Hans G. (with Aldridge, John A.) The effects of cell density and metabolite flux on cellular dynamics. (82m:92034)
- Tang, Min Ming Travelling wave fronts for a Lotka-Volterra equation with diffusion. (82c:92049)
- Vifjancev, V. P. Local construction of a completely integrable differential system with singularities. (Russian) (82k:35022)
- Vrdoljak, Božo Curvilinear "tubes" in the retraction method and the behaviour of solutions for the system of differential equations. (82j:34049)

34Dxx Stability theory [See also 58F10, 93Dxx.]

secondary classifications:

- (Gaines, Robert E.) See Rouché, N.; et al., (82i:34001)
- Mawhin, Jean See Rouché, N., (82i:34001)
- Rouché, N. (with Mawhin, Jean) ★Ordinary differential equations. (82i:34001)

34D05 Asymptotic properties; characteristic exponents

- Akinyele, Olusola Conditionally asymptotically invariant sets and perturbed systems. (Italian summary) 82h:34062
- Bobrowski, Dobiesław (with Wyrwińska, Aleksandra) Asymptotic behaviours of square integrable solutions of a certain differential equation. 82h:34063
- Conti, Roberto Linear differential equations asymptotically equivalent to $\dot{x} = 0$. (Italian) 82h:34062
- Dinovski, V. I. On the conditional stability of a nonlinear system of differential equations. (Bulgarian. Russian and English summaries) 82g:34062
- Fam Fu Attainability of central exponents of a linear Hamiltonian system. I. (Russian) 82i:34055a
- Attainability of central exponents of a linear Hamiltonian system. II. (Russian) 82i:34055b
- Granata, Antonio Corrigendum and addendum: "Singular Cauchy problems and asymptotic behaviour for a class of n th-order differential equations" [Funkcial. Ekvac. 20 (1977), no. 3, 193-212; MR 58 #6531]. 82i:34048
- Karashev, I. K. A method of determining the characteristic indices of linear homogeneous differential equations with periodic coefficients. (Russian) 82g:34063
- Krivošeev, Ju. A. (with Lucenko, A. V.) On stability of motion relative to a part of the variables for linear systems with constant or almost-constant matrices. 82h:34064
- Kroopnick, Allan J. Note on bounded L^p -solutions of a generalized Liénard equation. 82h:34065
- Loš, G. P. Sufficient stability conditions for solutions of a second-order linear differential system. (Russian) 82g:34064
- Lucenko, A. V. See Krivošeev, Ju. A., 82h:34064
- Malyševa, I. A. (with Šestakov, A. A.) Convergence of solutions in nonautonomous differential systems. (Russian) 82h:34060
- Martinkuk, A. A. (with Obolenskii, A. Ju.) Stability of the solutions of autonomous Wazewski systems. (Russian) 82f:34056
- Martynov, I. I. Necessary and sufficient conditions for the stability of the exponents of a linear system. (Russian. English summary) 82a:34063
- Nguyen The Hoan Asymptotic behavior of solutions of nonlinear systems of differential equations. (Russian) 82c:34047
- Obolenskii, A. Ju. See Martinkuk, A. A., 82f:34056
- Pasenčenko, Ju. A. See Pavljuk, I. A., 82d:34058
- Pavljuk, I. A. (with Pasenčenko, Ju. A.) Calculation of multipliers of second-order linear periodic systems. (Russian) 82d:34058
- Preda, Petre Sur la dichotomie exponentielle non uniforme des équations différentielles linéaires. 82c:34057
- Radochová, Draboslava (with Tryhuk, Václav) Die asymptotischen Formeln für die Lösungen der kanonischen Differentialgleichung 3. Ordnung. 82d:34059
- Sergeev, I. N. Sharp upper bounds of mobility of the Ljapunov exponents of a system of differential equations and the behavior of the exponents under perturbations approaching zero at infinity. (Russian) 82h:34066
- Šestakov, A. A. See Malyševa, I. A., 82h:34060
- Tryhuk, Václav See Radochová, Draboslava, 82d:34059
- Ulanov, G. M. Method of isochronous pointwise transformations in the theory of systems with variable structure. I. 82k:34056a
- Method of isochronous pointwise transformations in the theory of systems with variable structure. II. 82k:34056b
- Voskresenskii, E. V. Asymptotic stability of the equilibrium state of quasilinear systems of differential equations. (Russian. Kazakh summary) 82j:34048
- Vrdoljak, Božo Curvilinear "tubes" in the retraction method and the behaviour of solutions for the system of differential equations. 82j:34049
- Wagenführer, E. Die Determinantenmethode zur Berechnung des charakteristischen Exponenten der endlichen Hillschen Differentialgleichung. (English summary) 82c:34048
- Wang, Lian (with Wang, Mu Qiu) On a group of differential equations on the cylinder. II. (Chinese) 82j:34050
- Wang, Mu Qiu See Wang, Lian, 82j:34050
- Wyrwińska, Aleksandra See Bobrowski, Dobiesław, 82h:34063
- Zasmanov, S. N. Asymptotic stability with respect to the first approximation of solutions of a countable system of differential equations when the growth of right-hand sides depends on time t . (Russian) 82c:34058

secondary classifications:

- Adachi, Norihiko. See Takeuchi, Yasuhiro, (82c:92048)
 Al-Amoudi, Naji. See Carr, Jack, (82c:34061a)
 Balas, Mark J. Nonlinear state estimation and feedback control of nonlinear and bilinear distributed parameter systems. (82g:93035)
 Bernfeld, S. R. Generalized transversality, exchange of stability and Hopf bifurcation. (See 82m:92003)
 Caprino, Silvia. Generalized Hopf bifurcation. (82j:58006)
 Carr, Jack. (with Al-Amoudi, Naji) Rate of decay in critical cases. I. Finite-dimensional problems. (82c:34061a)
 Case, Ted J. (with Casten, Richard G.) Global stability and multiple domains of attraction in ecological systems. (82d:92019)
 Casten, Richard G. See Case, Ted J., (82d:92019)
 Chiou, K. L. See Chow, Pao Liu, (82c:34061)
 Chow, Pao Liu. (with Chiou, K. L.) Asymptotic stability of randomly perturbed linear periodic systems. (82c:34061)
 El-Owaidy, Hassan. On stability of derivo-periodic solutions of nonholonomic systems. (82g:34048)
 Hirata, Hironori. A model of hierarchical ecosystems with utility efficiency of mass and its stability. (82g:92049)
 Kiguradze, I. T. (with Rachunková, Irena) On a certain nonlinear problem for two-dimensional differential systems. (82c:34007)
 Koval'skii, I. P. (with Kudin, G. I.) On stability of certain nonstationary systems. (82g:70054)
 Kudin, G. I. See Koval'skii, I. P., (82g:70054)
 Lalli, B. S. See Skrapek, W. A., (82c:34043)
 Liang, Zhong Chao. The asymptotic behavior of solutions of certain nonlinear differential equations of the second order. (Chinese) (82m:34032)
 Ljokva, O. B. Exponential dichotomy of an invariant manifold. (Russian. English summary) (82b:58076)
 Lovelady, David Lowell. Asymptotic analyses of two fourth order linear differential equations. (82c:34037)
 Mirzov, D. D. Some asymptotic properties of solutions of a nonlinear differential system. (Russian) (82g:34042)
 Movčan, L. T. Stable nonlinear sampled-data systems with constantly acting perturbations. (Russian) (82d:93030)
 Rachunková, Irena. See Kiguradze, I. T., (82c:34007)
 Rodriguez, Gerardo. Limiting differential equations in relation to certain types of instability. (Spanish) (82g:34059)
 Ruelle, David. Strange attractors and characteristic exponents of turbulent flows. (82b:58057)
 Skrapek, W. A. (with Lalli, B. S.) On the boundedness and stability of a fourth-order differential equation. (82c:34043)
 Skvortsov, V. I. Numerical procedures for determining frequencies of natural oscillations and damping factors of one-dimensional systems with distributed parameters. (Russian) (82i:49042)
 Takeuchi, Yasuhiro. (with Adachi, Norihiko) The existence of globally stable equilibria of ecosystems of the generalized Volterra type. (82c:92048)

34D10 Perturbations

- Arnold, Gene W. Stability of periodic linear systems by a perturbation method. (82h:34067)
 Banks, S. P. Nonlinear perturbations of dynamical systems with bounded inputs. (82c:34057)
 Bulgakov, A. Ja. See Godunov, S. K., 82i:34049
 Godunov, S. K. (with Bulgakov, A. Ja.) Stability of stable matrices. (Russian) 82i:34049
 Ignat'ev, A. O. The effect of vanishing constantly acting perturbations on asymptotically stable motions. (Russian) 82c:34065
 Isaev, K. V. Stability of systems of ordinary differential equations in conditions of indeterminacy. (Russian) 82c:34049
 Kaščenko, S. A. (with Kolesov, Ju. S.) The increase in the "swing" by means of a two-frequency force. (Russian) 82b:34061
 Kolesov, Ju. S. See Kaščenko, S. A., 82b:34061
 Kuz'mina, L. K. On stability of systems of gyroscopic stabilization in the presence of perturbations. (82h:34068)
 Levantovskii, L. V. Singularities of the boundary of a region of stability. (Russian. English summary) 82h:34069
 Makarov, A. P. Stability of linear differential systems with the piecewise constant periodic frequency of a parametric perturbation. (Russian. English summary) 82g:34066
 Sinay, Leon. Kelvin's destabilizing effect of small damping. 82g:34067
 Stanišić, M. M. On the stability of generalized Hill's equation with three independent parameters. (French and German summaries) 82d:34060
 Vorotnikov, V. I. On the stability of motion relative to part of the variables for certain nonlinear systems. 82h:34070

secondary classifications:

- Akinyele, Oluola. Conditionally asymptotically invariant sets and perturbed systems. (Italian summary) (82h:34062)
 Bendrikov, G. A. (with Sidorova, G. A.) Nonlinear systems that are stable in the Hurwitz sector. (Russian) (82g:34074)
 Chatterjee, S. K. See Chongdar, A. K., (82d:92020)
 Chongdar, A. K. (with Chatterjee, S. K.) On an extension of classical Lotka-Volterra model of a predator-prey system. (82d:92020)
 Gupta, D. P. See Mittal, A. K., (82d:34046)
 Hara, Tadayuki. (with Yoneyama, Toshiaki; Okazaki, Yoshinori) On the boundedness of solutions of perturbed linear systems. (82j:34033)

- Mittal, A. K. (with Gupta, D. P.) A note on application of Struble's method to van der Pol type oscillators. (82d:34046)
 Month, L. A. (with Rand, R. H.) An application of the Poincaré map to the stability of nonlinear normal modes. (82c:34047)
 Okazaki, Yoshinori. See Hara, Tadayuki; et al., (82j:34033)
 Pandit, S. G. Differential systems with impulsive perturbations. (82c:34053)
 Rand, R. H. See Month, L. A., (82c:34047)
 Rüssmann, Helmut. Konvergente Reihenentwicklungen in der Störungstheorie der Himmelsmechanik. (82j:70011)
 Sidorova, G. A. See Bendrikov, G. A., (82g:34074)
 Yoneyama, Toshiaki. See Hara, Tadayuki; et al., (82j:34033)

34D15 Singular perturbations

- Balla, Katalin. On the replacement of the condition of boundedness for certain systems of linear ODEs with regular singularity. 82f:34057
 Ginzold, H. A new basis for singularly perturbed problems: a representation theorem. 82d:34061
 Dichotomies and moving singularities. 82i:34050
 Grujić, Ljubomir T. Uniform asymptotic stability of nonlinear singularly perturbed general and large-scale systems. 82c:34059
 Howes, Fred A. (with O'Malley, Robert E.) Singular perturbations of semilinear second order systems. 82c:34051
 Lyčak, M. M. A new approach to investigation of the stability of nonlinear dynamic systems. 82d:34062
 Martinjak, A. A. Stability of motion in the neutral case with increasing perturbations. (Russian) 82h:34062
 O'Malley, Robert E. See Howes, Fred A., 82i:34051

secondary classifications:

- Eremenko, V. A. Periodic solutions of nonlinear differential equations with a small parameter multiplying the derivatives. (Russian) (82g:34049)
 Reinhardt, Hans-Jürgen. Stability of singularly perturbed linear difference equations. (82h:65065)

34D20 Ljapunov stability

- Abdullin, R. Z. (with Anapol'skii, L. Ju.) On the theory of practical stability. 82k:34058
 Abgarjan, K. A. On a statement of a stability problem on a finite interval. 82h:34071
 Adachi, Norihiko. See Takeuchi, Yasuhiro, (82c:34043)
 Akinyele, Oluola. On the stability of self p -invariant sets. 82i:34052
 Anapol'skii, L. Ju. See Abdullin, R. Z., 82k:34058
 Anderson, Larry R. (with Ducich, Sarah E.) Weight functions for a class of Liapunov functions in the plane. 82g:34068
 Balintov, M. A. On instability of the position of equilibrium of a Hamiltonian system. 82i:34053
 Bernfeld, S. R. (with Salvadori, Luigi) Generalized Hopf bifurcation in \mathbb{R}^n and h -asymptotic stability. 82c:34060
 Brayton, Robert King. (with Tong, C. H.) Constructive stability and asymptotic stability of dynamical systems. (See 82c:94002)
 Bulgakov, A. Ja. Effectively calculable parameter of stability quality of systems of linear differential equations with constant coefficients. (Russian) 82h:34063
 Čirkova, I. A. Ljapunov stability in discontinuous dispersive dynamical systems. (Russian) 82c:34050
 Ducich, Sarah E. See Anderson, Larry R., 82g:34068
 Filatov, O. P. See Hapeev, M. M., 82f:34058
 Grujić, Ljubomir T. Uniquely bounded sets. 82d:34063
 On absolute stability and the Aizerman conjecture. 82m:34049
 Hale, Jack K. Stability from the bifurcation function. 82h:34064
 Hapeev, M. M. Problems of stability in systems of ordinary differential equations. (Russian) 82g:34069
 (with Filatov, O. P.) Stability of resonance problems. (Russian) 82f:34058
 Hazin, L. G. (with Šnol', Ė. Ė.) Smooth and sharp stability loss of stationary solutions of differential equations. (Russian. English summary) 82c:34055
 (with Šnol', Ė. Ė.) Equilibrium stability conditions under 1:3 resonance. 82m:34050
 See also Šnol', Ė. Ė., 82c:34054
 Husainov, D. Ja. See Kasperov, V. N., 82i:34054
 Ignat'ev, A. O. Formal stability in a critical case of n pairs of purely imaginary roots. (Russian) 82g:34070
 Ikeda, Masao. (with Šiljak, Dragoslav D.) Generalized decompositions of dynamic systems and vector Lyapunov functions. 82k:34059
 Jakovc, V. P. On the question of the stability of the solutions of second-order linear differential equations. (Russian. English summary) 82g:34071
 Kalitin, B. S. A theorem on instability. (Russian) 82c:34051
 Kanevskii, A. Ja. Ljapunov-Krasovskii functions. (Russian) 82h:34072
 Existence of a Ljapunov-Krasovskii function in the neighborhood of a certain set for a nonautonomous differential equation. (Russian) 82g:34072
 Kasperov, V. N. (with Husainov, D. Ja.) Application of the Ljapunov function for the study of stability in the case of constantly acting perturbations. (Russian) 82i:34054
 Kato, Junji. (with Kurosaki, Sadao) Notes on the stability in variation. 82c:34052
 Korčak, A. E. Construction of generalized-homogeneous Ljapunov-Krasovskii functions. (Russian) 82h:34073
 Existence of generalized-homogeneous Ljapunov-Krasovskii functions. (Russian) 82i:34060
 Kozlov, R. I. (with Matrosov, V. M.) Derivation of theorems of dynamic properties with Ljapunov vector functions for differential equations with perturbations. (Russian) 82c:34061
 Kožuhovskii, N. N. See Martinjak, A. A., 82j:34051

- Kravec, T. F. On the technical stability with respect to a part of the variables of systems with parameters. (Russian) **82c:34062**
- Kunicyn, A. L. (with Talimov, L. I.) Instability of periodic motion of a multidimensional system in a case of internal resonance. (Russian) **82i:34055**
- Kurosaki, Sadao. See Kato, Junji, **82c:34052**
- Lahadonov, V. M. On quadratic integrals of linear autonomous systems. **82i:34056**
- Laurenjuk, S. P. Stability in the large of a nonautonomous second-order system. (Ukrainian. Russian summary) **82a:34064**
- Martinjuk, A. A. Method of integral inequalities in the theory of stability of motion. **82d:34064**
(with Kozuhovskii, N. N.) Stability of the equilibrium position of Hamiltonian systems. **82j:34051**
- Matrosov, V. M. See Kozlov, R. I., **82c:34061**
- Medvedev, S. V. (with Thai, V. N.) On stability in one critical case. **82k:34061**
- Merenkov, Ju. N. See Šestakov, A. A., **82i:34062**
- Michel, Anthony N. See Miller, Richard K., **82d:34065**
- Miller, Richard K. (with Michel, Anthony N.) Stability theory for countably infinite systems of differential equations. **82a:34065**
- Negrini, Piero (with Salvadori, Luigi) Stability problems for Hopf bifurcation. **82d:34066**
- Ohta, Yuzo. Stability criteria for off-diagonally monotone nonlinear dynamical systems. (See **82c:94002**)
- Özkan, İ. R. On the uniform boundedness of a nonlinear system. **82d:34067**
- Pai, M. A. Some mathematical aspects of power system stability by Lyapunov's method. **82b:34065**
- Pandit, S. G. Differential systems with impulsive perturbations. **82c:34053**
- Podtukaev, V. A. A method for constructing Liapunov functions. (Russian summary) **82j:34052**
- Prokop'ev, V. P. See Vorotnikov, V. I., **82k:34064**
- Sadykov, H. M. Investigation of the stability of the solution of a system of linear equations connected with the analysis of differential transformers. (Russian. Tajiki summary) **82b:34066**
- Salvadori, Luigi. See Bernfeld, S. R., **82c:34060** and Negrini, Piero, **82d:34066**
- Save'ev, Ju. V. Study of systems of differential equations near the boundaries of the stability region. **82i:34057**
- Šestakov, A. A. (with Merenkov, Ju. N.) Localization of the cluster set of a solution with a bounded interval of definition. (Russian) **82k:34062**
- Šiljak, Dragoslav D. See Ikeda, Masao, **82c:34059**
- Skar, Sherwin J. Stability of multimachine power systems with nontrivial transfer conductances. **82d:34068**
- Skrapič, W. A. Some instability theorems for third order ordinary differential equations. **82d:34069**
- Skripnik, V. P. Degenerate systems and a small parameter multiplying the derivative. (Russian) **82b:34067**
- Šnoř, Ě. Ě. (with Hazin, L. G.) Stability of stationary solutions of general systems of differential equations near critical cases. (Russian. English summary) **82c:34054**
See also Hazin, L. G., **82c:34055** and **82m:34050**
- Takeuchi, Yasuhiro (with Adachi, Norihiko) Existence of stable equilibrium point for dynamical systems of Volterra type. **82c:34063**
- Talimov, L. See Kunicyn, A. L., **82i:34055**
- Teregulov, A. Ė. See Vasil'ev, S. N., **82i:34059**
- Thai, V. N. See Medvedev, S. V., **82k:34061**
- Tong, C. H. See Brayton, Robert King. (See **82c:94002**)
- Vasil'ev, S. N. (with Teregulov, A. Ė.) Theorems on stability. (Russian) **82i:34059**
- Veissenberg, A. N. Algorithm for the derivation of Liapunov's function in the form of a sum of squares of integrals. **82k:34063**
- Vidossich, Giovanni Two remarks on the stability of ordinary differential equations. **82c:34064**
- Vorotnikov, V. I. (with Prokop'ev, V. P.) On stability of motion of linear systems with respect to some of the variables. **82k:34064**
- Vũ Trong Tuan. On first approximation stability relative to a part of variables. **82g:34073**
- Wang, Lian. On the construction of generalized Lyapunov's function. **82i:34058**
- Zavnerčik, V. Ė. On instability in the presence of several resonances. **82m:34051**
- Zubov, I. V. Unbounded equilibrium solutions of quasilinear systems. (Russian. English summary) **82f:34060**
- Zubov, S. V. Asymptotic properties of the solutions of systems of ordinary differential equations with holomorphic right-hand sides. (Russian) **82i:34059**
- secondary classifications:
- Akinyele, Oluola. On the partial stability of the nonlinear abstract Cauchy problem. (Italian summary) **(82h:34081)**
- Atkinson, F. V. Exponential behaviour of eigenfunctions and gaps in the essential spectrum. **(82f:34022)**
- Beattie, Andrew J. See Heithaus, E. Raymond; et al., **(82f:92043)**
- Beleckii, V. V. (with Kasatkin, G. V.) Extremal properties of resonance motions. (Russian) **(82c:34041)**
- Bendrikov, G. A. (with Miftahov, V. I.) Investigation of the stability of linear and linearized systems by formulas of the free parameter of the analytic root locus method. (Russian) **(82i:93050)**
- Bernussou, J. See Grujić, Ljubomir T.; et al., **(82h:93052)**
- Borne, P. See Grujić, Ljubomir T.; et al., **(82h:93052)**
- Burgat, C. See Grujić, Ljubomir T.; et al., **(82h:93052)**
- Cao, Zhen Zhong. On a necessary and sufficient condition for a motion $f(p, t)$ to be almost periodic, and a corollary. (Chinese. English summary) **(82g:34055)**
- Citric'kil, O. Ė. See Husainov, D. Ja., **(82h:54056)**
- Culver, David C. See Heithaus, E. Raymond; et al., **(82f:92043)**
- Dilgenskiĭ, S. N. Estimation of attraction region of multidimensional nonlinear system by aggregation-decomposition method. **(82a:93041)**
- Engler, Hans. Functional-differential equations in Banach spaces: growth and decay of solutions. **(82f:34110)**
- Farkas, M. Attractors of systems close to periodic ones. **(82i:58065)**
- Fedenja, M. M. Extremal perturbation of quasicaracteristic numbers and quasimultipliers. (Russian) **(82h:93060)**
- Gentina, J. C. See Grujić, Ljubomir T.; et al., **(82h:93052)**
- Gnoenskiĭ, L. S. Estimates of natural oscillations in linear follow-up systems with incomplete parameter information. **(82k:34041)**
- Göbber, F. (with Williamowski, K.-D.) Liapunov approach to multiple Hopf bifurcation. **(82b:34052)**
- Grujić, Ljubomir T. (with Gentina, J. C.; Borne, P.; Burgat, C.; Bernussou, J.) Sur la stabilité des systèmes de grande dimension. Fonctions de Lyapunov vectorielles. (English summary) **(82h:93052)**
Lyapunov-like solutions for stability problems of the most general stationary Lurie-Postnikov systems. **(82i:93055)**
- Hagedorn, P. (with Teschner, W.) An instability theorem for steady motions in free and restrained dynamical systems. **(82j:70016)**
- Heithaus, E. Raymond (with Culver, David C.; Beattie, Andrew J.) Models of some ant-plant mutualisms. **(82f:92043)**
- Husainov, D. Ja. (with Citric'kil, O. Ė.) Topological aspects of the study of the stability of A. M. Liapunov's second method. (Russian) **(82h:54056)**
- Ivanov, A. P. Investigation of stability of constant Lagrange solutions of the plane unrestricted three-body problem. **(82i:70012)**
- Jakovlev, O. S. Structural synthesis of ergatic systems of stabilization. (Russian) **(82j:93035)**
- Junosov, M. K. See Logofet, D. O., **(82g:92051)**
- Kasatkin, G. V. See Beleckii, V. V., **(82c:34041)**
- Kato, Junji. Liapunov's second method in functional-differential equations. **(82a:34092)**
- Koreniv'skii, D. G. On the construction of a stochastic Liapunov function by the perturbation method. I. Linear dynamic systems with parametric quasistationary random perturbations of constant spectral density. (Russian) **(82c:93075)**
- Kozlov, R. I. (with Matrosov, V. M.) Comparison principle in the theory of differential equations with perturbations. (Russian) **(82a:34075)**
- Kunicyn, A. L. (with Markeev, A. P.) Stability in resonance cases. (Russian) **(82h:70008)**
- Kuraev, N. M. See Vasil'eva, A. B., **(82g:34080)**
- Lakshmikantham, V. (with Leela, S.; Oğuztöreli, M. N.) Quasilinear, vector Liapunov functions, and monotone method. **(82k:34016)**
- Leela, S. See Lakshmikantham, V.; et al., **(82k:34016)**
- Lewowicz, Jorge. Liapunov functions and topological stability. **(82d:58032)**
- Logofet, D. O. (with Junosov, M. K.) Questions of qualitative stability and regularization in dynamic models of cotton plant agrobiocenosis. (Russian) **(82g:92051)**
- Markeev, A. P. See Kunicyn, A. L., **(82h:70008)**
- Matrosov, V. M. See Kozlov, R. I., **(82a:34075)**
- McDonough, Joseph M. Suppressing oscillations in nonlinear systems. **(82k:34049)**
- Miftahov, V. I. See Bendrikov, G. A., **(82i:93050)**
- Oğuztöreli, M. N. See Lakshmikantham, V.; et al., **(82k:34016)**
- Petrovskaja, I. G. TM-equivalence and classification of noncompact invariant sets of dynamical systems. (Russian) **(82m:54044)**
- Piljugin, S. Ju. A manifold that determines the type of asymptotically stable invariant set. (Russian) **(82m:58034)**
- Pustovoirov, M. O. Liapunov's second method and the design of control systems. (Russian) **(82k:93049)**
- Saakjan, A. O. Absolute stability of integral manifolds. (Russian) **(82k:34054)**
- Salah, M. M. Constructing Liapunov functions for transient stability problems. **(82i:93058)**
- Shrivastava, S. K. Stability theorems for multidimensional linear systems with variable parameters. **(82g:93034)**
- Šiljak, Dragoslav D. ★ Large-scale dynamic systems. **(82j:93004)**
- Skowronski, Janisław M. ★ Liapunov dynamics of lumped systems. **(82k:58061)**
- Song, Jian (with Yu, Jing Yuan) On stability theory of population systems and critical fertility rates of women. (Chinese. English summary) **(82c:92053)**
- Teschner, W. See Hagedorn, P., **(82j:70016)**
- Thai, V. N. On stability of constant Laplace solutions of the unrestricted three-body problem. **(82m:70007)**
- Tong, Hing. Criterion for unboundedness in the constructive approach to the stability of matrices. (Italian summary) **(82m:93070)**
- Urusov, I. D. Stability of periodic solutions during parametric excitation of oscillations in a multimass rotor. (Russian) **(82g:70044)**
- Vasil'eva, A. B. (with Kuraev, N. M.) A one-sided stable case of a singularly perturbed equation. (Russian) **(82g:34080)**
On the question of critical cases for singularly perturbed equations. (Russian) **(82g:34087)**
- Williamowski, K.-D. See Göbber, F., **(82b:34052)**
- Yu, Jing Yuan. See Song, Jian, **(82c:92053)**
- Zavnerčik, V. Ė. On the stability of autonomous systems in the presence of several resonances. **(82h:70026)**
- Zubov, V. I. ★ Проблема устойчивости процессов управления. (Russian) [Problem of stability of control processes] **(82h:93028)**
★ Теория уравнений управляемого движения. (Russian) [Theory of equations of a controllable motion] **(82i:34062)**
- Žumator, S. S. The absolute stability of a programmed manifold in the simplest critical case. (Russian) **(82i:34060)**

34D25 Popov-type stability

- Bendrikov, G. A. (with Sidorova, G. A.) Nonlinear systems that are stable in the Hurwitz sector. (Russian) **82g:34074**
- Sidorova, G. A. See Bendrikov, G. A., **82g:34074**
- Žumator, S. S. The absolute stability of a programmed manifold in the simplest critical case. (Russian) **82i:34060**

34D30 Structural stability and analogous concepts [See also 58Fxx.]

- Barnes, Earl R. Stability conditions for linear Hamiltonian systems with periodic coefficients. **82m:34056**
 Filinych, V. V. See Rozet, I. G., **82h:34069**
 Pless, V. A. Stability of an arbitrary system with respect to perturbations that are small in the sense of C^1 . (Russian) **82h:34068**
 Rozet, I. G. (with Filinych, V. V.) Homoclinic trajectories in some classes of autonomous three-dimensional dynamic systems. (Russian) **82h:34069**
 Williams, Robert F. The bifurcation space of the Lorenz attractor. **82f:34061**

secondary classifications:

- Andersen, Kurt Munk. See Sandqvist, Allan, (**82f:34046**)
 Aracil, Javier. Structural stability of low-order system dynamics models. (**82c:58055**)
 Beljakov, L. A. The bifurcation set in a system with a homoclinic saddle curve. (Russian) (**82f:58066**)
 Brjuno, A. D. Divergence of a real normalizing transformation. (Russian. English summary) (**82g:58076**)
 Liao, Shan Tao. Obstruction sets. I. (Chinese) (**82i:58038**)
 Luo, Ding Jun. Structural stability for polynomial systems. (Chinese. English summary) (**82i:58054**)
 Neumann, Denn A. Uncountably many distinct topologically hyperbolic equilibria in \mathbb{R}^4 . (**82g:58076**)
 Pixton, Dennis. More counterexamples to Coleman's conjecture. (**82g:58077**)
 Pless, V. A. Connection between various conditions for structural stability. (Russian) (**82g:58046**)
 Sandqvist, Allan (with Andersen, Kurt Munk) Some results concerning periodic solutions of plane autonomous differential systems. (German and Russian summaries) (**82f:34046**)

34D40 Ultimate boundedness

- Hara, Tadayuki. On the uniform ultimate boundedness of the solutions of certain third order differential equations. **82f:34062**

secondary classifications:

- Hara, Tadayuki (with Yoneyama, Toshiaki; Okazaki, Yoshinori) On the boundedness of solutions of perturbed linear systems. (**82j:34033**)
 Husanov, B. See Šaripov, Š. R.; et al., (**82k:34034**)
 Mamaev, S. H. See Šaripov, Š. R.; et al., (**82k:34034**)
 Okazaki, Yoshinori. See Hara, Tadayuki; et al., (**82j:34033**)
 Šaripov, Š. R. (with Husanov, B.; Mamaev, S. H.) On some questions of the trajectories of an n -dimensional generally homogeneous differential system. (Russian) (**82k:34034**)
 Yoneyama, Toshiaki. See Hara, Tadayuki; et al., (**82j:34033**)

34D99 None of the above, but in this section

- Abdullin, R. Z. Some questions on practical stability. (Russian) **82h:34070**
 (with Anapol'skii, L. Ju.) On problems of practical stability. (Russian) **82i:34061**
 Anapol'skii, L. Ju. See Abdullin, R. Z., **82i:34061**
 Cazacu, Mariana (with Coca, Marilena; Polexe, R.) Considerations concerning the study of the stability of multiple systems. (Romanian. French summary) **82g:34075**
 Coca, Marilena. See Cazacu, Mariana; et al., **82g:34075**
 Garaženko, F. G. A numerical approach to the solution of problems of stability on a finite time interval. (Russian. English summary) **82m:34052**
 Ianiro, N. (with Maffei, C.) On the asymptotic behavior of the solutions of the nonlinear equation $\ddot{x} + h(t, x)\dot{x} + p^2(t)f(x) = 0$. **82h:34074**
 Maffei, C. See Ianiro, N., **82h:34074**
 Polexe, R. See Cazacu, Mariana; et al., **82g:34075**
 Šakirova, Ju. S. Homeomorphic transformations of cycles of the second kind. (Russian) **82h:34071**

secondary classifications:

- Augusteijn, Marijke F. (with Breitenberger, Ernst) Integration of near-resonant systems in slow-fluctuation approximation. (**82e:70020a**)
 (with Breitenberger, Ernst) Erratum: "Integration of near-resonant systems in slow-fluctuation approximation". (**82e:70020b**)
 Breitenberger, Ernst. See Augusteijn, Marijke F., (**82e:70020**)
 Caljuk, V. Z. Perturbations of exponentially stable differential inclusions by generalized functions. (Russian) (**82j:34012**)
 Harrison, Gary W. Stability under environmental stress: resistance, resilience, persistence, and variability. (**82d:92031**)
 Nunney, Len. The stability of complex model ecosystems. (**82m:92073**)

34Exx Asymptotic theory

- Alinhac, S. \star Équations différentielles: étude asymptotique; applications aux équations aux dérivées partielles. (French) [Differential equations: asymptotic study; applications to partial differential equations] **82f:34063**

34E05 Asymptotic expansions

- Ališev, A. Asymptotic representation of solutions of a system of nonlinear differential equations. (Russian) **82g:34076**
 Splitting of a system of linear nonhomogeneous differential equations that depend on two small parameters. (Russian) **82k:34065**
 Alybaev, K. S. Some characteristics of the asymptotic behavior of the solutions of systems of differential equations with a small parameter multiplying the derivatives. (Russian) **82g:34077**

- Alymkulov, K. Uniformization method and the proof of the Lighthill method. (Russian) **82m:34053**

- Barvinskii, A. F. See Sokol, B. I., **82h:34072**
 Braksma, B. L. J. Laplace integrals in singular differential and difference equations. **82f:34064**

- Čan Kim T'i. An asymptotic method for constructing solutions of N th-order differential equations with slowly varying parameters (autonomous case). (Russian) **82i:34062**

- An asymptotic method for constructing solutions of n th order differential equations with slowly changing parameters in the nonautonomous case. (Russian) **82j:34053**

- Eastham, Michael S. P. (with Grudniewicz, C. G. M.) Asymptotic theory and deficiency indices for fourth and higher order selfadjoint equations: a simplified approach. **82m:34054**

- Fečenko, S. F. See Sotničenko, M. A., **82h:34073** and **82d:34073**

- Friedman, Charles N. Asymptotic forms of solutions of certain linear ordinary differential equations. **82f:34065**

- Gasyimov, E. A. Construction of a fundamental matrix and asymptotic representation of solutions of ordinary linear differential systems depending on a parameter. (Russian. Azerbaijani and English summaries) **82f:34066**

- Grudniewicz, C. G. M. Asymptotic methods for fourth-order differential equations. **82d:34070**

See also Eastham, Michael S. P., **82m:34054**

- Homa, G. P. Asymptotic method of investigating solutions of differential systems. (Russian) **82m:34055**

- de Jager, E. M. Singuläre Störungen von nichtlinearen Operatoren. **82k:34066**

- Jiang, Fu Ru. On boundary value problems for a class of ordinary differential equations with turning points. (Chinese. English summary) **82m:34056**

- Kates, Ronald E. Uniformity test for the method of strained coordinates. **82j:34054**

- Konjaev, Ju. A. Some questions of the theory of asymptotic integration. (Russian) **82h:34075**

- Kostenko, K. S. Asymptotic behavior of the solutions of fourth-order linear ordinary differential equations. (Ukrainian. Russian summary) **82m:34065**

- Kuraev, N. M. See Vasil'eva, A. B., **82g:34080**

- Lutz, Donald A. Connection problems in the parameterless case: progress and more problems. **82d:34071**

- Meilieu, T. K. Construction of asymptotic solutions of second-order equations with a small parameter multiplying the derivative of fractional rank. (Russian) **82g:34078**

- Meyer, Sybille. Eine asymptotische Lösungsdarstellung von nichtselbst-adjungierten Randwertaufgaben für entartete gewöhnliche Differentialgleichungen 2. Ordnung mit einem kleinen Parameter bei den höchsten Ableitungen. **82g:34079**

- Rimarenko, V. V. Application of the variation of constants to the estimation of the exactness of asymptotic solutions. (Russian) **82m:34057**

- Roberts, S. M. Variational perturbation method and power-series approximation method. **82i:34063**

- Sibuya, Yasutaka (with Sperber, Steven) Some new results on power-series solutions of algebraic differential equations. **82d:34072**

- Smiljanskii, V. R. Some properties of Stokes multipliers. I. (Russian) **82f:34067**

- Sokol, B. I. (with Barvinskii, A. F.) Asymptotic expansion for a class of nonlinear differential equations. (Russian) **82h:34072**

- Sotničenko, M. A. (with Fečenko, S. F.) Asymptotic solution for a system of nonlinear differential equations with slowly varying parameters. (Russian) **82h:34073**

- Sotničenko, N. A. (with Fečenko, S. F.) Asymptotic integration of differential equations. (Russian) **82d:34073**

- Sperber, Steven. See Sibuya, Yasutaka, **82d:34072**

- Vasil'eva, A. B. (with Kuraev, N. M.) A one-sided stable case of a singularly perturbed equation. (Russian) **82g:34080**

- Zibolen, E. Asymptotic solutions of a boundary value problem with degenerate limit spectrum. (Russian) **82h:34074**

secondary classifications:

- Balser, Werner. Zum Einzigkeitssatz in der Invariantentheorie meromorpher Differentialgleichungen. (**82d:34006**)

- Chin, R. C. Y. On the matched asymptotic solution of the Troesch problem. (**82j:65052**)

- Do, Duong Dang (with Weiland, R. H.) Poisoning-induced exchange of steady states in a catalytic chemical reactor. (**82d:80028**)

- Emel'janov, K. V. Solution of the first boundary value problem for an ordinary differential equation with a small parameter. (Russian) (**82m:34016**)

- Gérard, R. (with Sibuya, Yasutaka) Étude de certains systèmes de Pfaff avec singularités. (**82m:34008a**)

See also Ramis, Jean-Pierre, (**82m:34008b**)

- Gilbert, Richard C. Shearing transformation of a linear system at an irregular singular point. (**82c:34051**)

- Grudo, E. I. A differential system with a zero root of the characteristic equation and with periodic coefficients. (Russian) (**82f:34050**)

- Lange, Charles G. Branching from large eigenvalues of nonlinear Sturm-Liouville systems. (**82a:34023**)

- Naidu, D. S. (with Rajagopalan, P. K.) Singular perturbation method for a closed-loop optimal control problem. (**82d:49030**)

- Radochová, Draboslava (with Tryhuk, Václav) Die asymptotischen Formeln für die Lösungen der kanonischen Differentialgleichung 3. Ordnung. (**82d:34059**)

- Rajagopalan, P. K. See Naidu, D. S., (**82d:49030**)

- Ramis, Jean-Pierre. À propos du théorème de Borel-Ritt à plusieurs variables. (**82m:34008b**)

- Reiss, Edward L. A modified two-time method for the dynamic transitions of bifurcation. (**82e:47084**)

- Richberg, R. A monotonicity property of Bessel functions. (**82c:33012**)

- Schlosser-Haupt, Silke (with Wyrwich, Herbert) Über die Stokes-Multiplikatoren gewisser linearer Differentialgleichungen n -ter Ordnung. (**82d:34009**)

- Sibuya, Yasutaka. See Gérard, R., (**82m:34008a**) and Ramis, Jean-Pierre, (**82m:34008b**)
 Svensson, S. Leif. Singular differential operators and distributions. (**82d:47050**)

Tryluk, Václav See Radochová, Drahoslava, (82d:34059)
 Weiland, R. H. See Do, Duong Dang, (82d:80028)
 Wyrwich, Herbert See Schlosser-Haupt, Silke, (82d:34009)

34E10 Perturbations

Cohen, Donald S. See Rosenblat, S., 82g:34081
 Nayfeh, Ali Hasan ★Introduction to perturbation techniques. 82f:34068
 Persek, Stephen C. Asymptotic stability on slow time scales for periodic systems. 82j:34055
 Roberts, S. M. Continuation and the variational perturbation method. 82e:34057
 Rosenblat, S. (with Cohen, Donald S.) Periodically perturbed bifurcation. II. Hopf bifurcation. 82g:34081

secondary classifications:

Arya, J. C. (with Bojadziev, G. N.) Time-dependent oscillating systems with damping, slowly varying parameters, and delay. (German summary) (82m:34075)
 Bojadziev, G. N. See Arya, J. C., (82m:34075)
 Deptula, Elzbieta On the convergence of solutions of a second order nonlinear differential equation. (82g:34034)
 Heading, J. The equality of multiple integrals in the series development of a reflection coefficient for waves governed by a general linear differential equation. (82k:78008)
 Persek, Stephen C. Hierarchies of iterated averages for systems of ordinary differential equations with a small parameter. (82d:34056)

34E15 Singular perturbations, general theory

Abgarjan, K. A. Splitting of a singularly perturbed multitempo system. (Russian. Armenian and English summaries) 82d:34074
 Alybaev, K. S. Asymptotic behavior of solutions of systems of differential equations with a small parameter multiplying derivatives. (Russian) 82e:34058
 Cole, Julian D. See Kevorkian, Jerry, 82g:34082
 Eckhaus, Wiktor On some basic concepts in the analysis of singular perturbations. 82d:34075
 Howes, Fred A. Singularly perturbed semilinear systems. 82j:34056
 Some old and new results on singularly perturbed boundary value problems. 82e:34066
 An asymptotic theory for a class of nonlinear Robin problems. II. 82e:34065
 Some higher order singular perturbation problems. (See 82m:92003)
 Kasimov, K. A. Estimates of solutions of linear singularly perturbed second-order ordinary differential equations. (Russian. Kazakh summary) 82a:34066
 Kates, Ronald E. Underlying structure of singular perturbations on manifolds. 82i:34064
 Kevorkian, Jerry (with Cole, Julian D.) ★Perturbation methods in applied mathematics. 82g:34082
 Konjaev, Ju. A. Construction of regularized asymptotics for linear systems with a polynomial spectrum singularity. (Russian) 82b:34075
 Kreiss, Heinz-Otto Resonance for singular perturbation problems. 82i:34065
 Leung, Anthony W. Connection formulas and behavior in the large for solutions of linear differential equations depending singularly on a parameter. 82i:34076
 Ling, Rina Singular perturbation for nonlinear boundary value problems. 82j:34057
 Lomov, S. A. (with Safonov, V. F.) Regularization method for systems with a weak nonlinearity, in the resonance case. (Russian) 82e:34059
 Milošević, Radivoje See Starun, I. I., 82g:34084
 O'Malley, Robert E. On multiple solutions of singularly perturbed systems in the conditionally stable case. 82d:34077
 Safonov, V. F. See Lomov, S. A., 82e:34059
 Sari, Tewfik Sur le comportement asymptotique des solutions dans un problème aux limites semi-linéaire. (English summary) 82g:34083
 Skinner, L. A. Note on the Lagerstrom singular perturbation models. 82i:34066
 Skripnik, V. P. On the small parameter multiplying the derivative. (Russian) 82b:34076
 Starun, I. I. (with Milošević, Radivoje) Asymptotics of the solutions of singular perturbed systems. (Russian) 82g:34084
 The construction of solutions of singularly perturbed linear systems. (Russian) 82j:34058

secondary classifications:

Faminskaja, M. V. See Vasil'eva, A. B., (82j:49002)
 Habets, P. Singular perturbations of elliptic boundary value problems. (82g:35010)
 Howes, Fred A. (with O'Malley, Robert E.) Singular perturbations of semilinear second order systems. (82i:34051)
 Kevorkian, Jerry Passage through resonance. (82e:70020)
 Kreiss, Barbro (with Kreiss, Heinz-Otto) Numerical methods for singular perturbation problems. (82e:65088)
 Kreiss, Heinz-Otto See Kreiss, Barbro, (82e:65088)
 Lutz, Robert (with Sari, Tewfik) Sur le comportement asymptotique des solutions dans un problème aux limites non linéaires. (English summary) (82f:34015)
 Miranker, Willard L. ★Numerical methods for stiff equations and singular perturbation problems. (82h:65058)
 Naidu, D. S. See Rajagopalan, P. K., (82d:49024)
 O'Malley, Robert E. See Howes, Fred A., (82i:34051)
 Panfilov, N. G. On multipoint boundary value problems for linear systems of differential singularly perturbed equations. (Russian) (82b:34024)
 Rajagopalan, P. K. (with Naidu, D. S.) Singular-perturbation analysis of a closed-loop fixed-endpoint optimal-control problem. (82d:49024)
 Sari, Tewfik See Lutz, Robert, (82f:34015)
 Vasil'eva, A. B. (with Faminskaja, M. V.) Investigation of a nonlinear optimal control problem by the method of the theory of singular perturbations. (Russian) (82j:49002)

34E20 Singular perturbations, turning point theory, WKB-methods

Boyd, John Philip Sturm-Liouville eigenproblems with an interior pole. 82k:34067
 Davydov, A. B. "Hidden" turning points. (Russian) 82e:34067
 Drjaski, S. Ju. Asymptotic representation of solutions of singularly perturbed differential equations with a turning point. (Russian) 82a:34067
 de Groen, Pieter P. N. The singularly perturbed turning-point problem: a spectral approach. 82d:34078
 Kopell, Nancy A geometric approach to boundary layer problems exhibiting resonance. 82d:34079
 The singularly perturbed turning-point problem: a geometric approach. 82g:34085
 (with Parter, Seymour V.) A complete analysis of a model nonlinear singular perturbation problem having a continuous locus of singular points. 82g:34086
 Ljubarskii, G. Ja. On the theory of WKB-approximation. (Russian. English summary) 82b:34077
 Meyer, Richard E. See Painter, J. F., 82e:34060
 Nishimoto, Toshihiko Uniform asymptotic properties of the WKB method. 82m:34058
 Olver, Frank W. J. The general connection-formula problem for linear differential equations of the second order. 82f:34069
 Whittaker functions with both parameters large: uniform approximations in terms of parabolic cylinder functions. 82c:34068
 Painter, J. F. (with Meyer, Richard E.) New connection method across more general turning points. 82e:34060
 Parter, Seymour V. See Kopell, Nancy, 82g:34086
 Pettini, Giovanna Boschi Some extensions and sharpenings of the W.K.B. method. (Italian. English summary) 82f:34070
 Sauter, E. G. Improvement on the WKB method using an algebraic formalism. 82m:34059
 Sibuya, Yasutaka A theorem concerning uniform simplification at a transition point and the problem of resonance. 82m:34060
 Vasil'eva, A. B. On the question of critical cases for singularly perturbed equations. (Russian) 82g:34087

secondary classifications:

Argémi, José (with Gola, Maurice; Chagneux, Hélène) Qualitative analysis of a model generating long potential waves in Ba-treated nerve cells. I. Reduced systems. (82m:92019a)
 (with Gola, Maurice; Chagneux, Hélène) Qualitative analysis of a model generating long potential waves in Ba-treated nerve cells. II. Complete system. (82m:92019b)
 Bjorken, James D. (with Orbach, Harry S.) WKB approximation for general matrix Hamiltonians. (82k:81017)
 Brander, Olle High-energy behavior of phase shifts for scattering from singular potentials. (82i:81125)
 Chagneux, Hélène See Argémi, José; et al., (82m:92019)
 Dobrohotov, S. Ju. (with Maslov, V. P.) Finite-zone almost periodic solutions in WKB-approximations. (Russian) (82i:58035)
 Drazin, P. G. (with Reid, William Hill) ★Hydrodynamic stability. (82h:76021)
 Gola, Maurice See Argémi, José; et al., (82m:92019)
 Joseph, Daniel D. Factorization theorems and repeated branching of solutions at a simple eigenvalue. (82f:58031)
 Junosov, M. K. Operator equations with small parameter and nonlocal boundary conditions. (Russian) (82b:34079)
 Kesarwani, R. N. (with Varshni, Y. P.) Four-term WKB approximation and its application to Varshni V and Lennard-Jones potentials. (French summary) (82e:81013)
 Klein, Abraham (with Li, Ching Teh) Wentzel-Kramers-Brillouin quantization of pseudospin Hamiltonians. (82f:81031)
 Li, Ching Teh See Klein, Abraham, (82f:81031)
 Lindzen, Richard S. (with Rosenthal, Arthur J.) A WKB asymptotic analysis of baroclinic instability. (82k:76035)
 Maslov, V. P. See Dobrohotov, S. Ju., (82i:58035)
 Mattheij, R. M. M. Estimating the discretization error in three-point difference schemes for second order linear singularly perturbed BVP. (82b:34023)
 Mizrahi, Maurice M. On the WKB approximation to the propagator for arbitrary Hamiltonians. (82b:58037)
 Nayfeh, Ali Hasan ★Introduction to perturbation techniques. (82f:34068)
 Orbach, Harry S. See Bjorken, James D., (82k:81017)
 Paljutkin, V. G. Asymptotic and analytic properties of a solution of the Sturm-Liouville equation. (Russian) (82b:34026)
 Pasupathy, J. (with Singh, Virendra) Higher order JWKB expressions for the energy levels and the wavefunction at the origin. (82e:81034)
 Reid, William Hill Turning-point problems for ordinary differential equations of hydrodynamic type. (82d:76038)
 See also Drazin, P. G., (82h:76021)
 Rosenthal, Arthur J. See Lindzen, Richard S., (82h:76035)
 Singh, Virendra See Pasupathy, J., (82e:81034)
 Varshni, Y. P. See Kesarwani, R. N., (82e:81013)

34E99 None of the above, but in this section

MacGillivray, A. D. On the switchback term in the asymptotic expansion of a model singular perturbation problem. 82d:34080

secondary classifications:

Kanevskii, Z. I. On integral asymptotic behavior in certain boundary value problems. (Russian) (82c:34069)

34F05 Equations and systems with randomness [See also 60H10, 93Exx.]

- Adomian, George (with Malakian, K.) Self-correcting approximate solution by the iterative method for linear and nonlinear stochastic differential equations. **82a:34068**
- Chou, K. L. See Chow, Pao Liu, **82a:34061**
- Chow, Pao Liu (with Chiu, K. L.) Asymptotic stability of randomly perturbed linear periodic systems. **82a:34061**
- Demenin, O. M. (with Diesperova, M. M.) Random parametric oscillations in linear systems. (Russian) **82f:34071**
- Functional solutions of n th-order linear differential equations with random coefficients. (Russian) **82f:34072**
- Diesperova, M. M. See Demenin, O. M., **82f:34071**
- Kolomoie, V. G. Random oscillations of nonlinear systems with lumped parameters. (Russian) **82a:34076**
- Malakian, K. See Adomian, George, **82a:34068**

secondary classifications:

- Adomian, George On product nonlinearities in stochastic differential equations. (Russian) **82i:60105**
- Bécs, Georges A. Stochastic prey-predator relationships. (**82a:92016**)
- Brommunt, E. Einmassenschwinger mit Coulombscher Reibung und zufälliger Impulsregung. (**82a:70028**)
- Doss, Halim Connections between stochastic and ordinary integral equations. (**82j:60112**)
- Gilman, H. I. Strongly nonlinear stochastic differential equations. (Russian) (**82m:60065**)
- Hansen, P. J. (with Nicholson, Dwight R.) Cubic turbulence: a model problem. (**82c:76034**)
- Jasinskii, V. K. Stability of the almost surely trivial solution of stochastic functional-differential equations. (Russian) (**82b:60076**)
- K'ou The Dyk See Nguen Dong An', (**82c:60097**)
- Kifer, Yuri The spectrum of small random perturbations of dynamical systems. (**82c:60125**)
- Lax, Melvin D. Obtaining approximate solutions of random differential equations by means of the method of moments. (**82a:60093**)
- Loginov, V. M. (with Šapiro, V. E.) Behavior of an oscillator under a periodic parametric action with chaotic modulation. (**82j:58081**)
- Maravall Casesnoves, Dario Finite difference equations and linear differential equations with random coefficients. (Spanish. English summary) (**82g:60081**)
- Asymptotic behavior and invariant solutions of linear systems of differential equations and of finite differences with random initial values and stochastic theory of control. (Spanish. English summary) (**82m:93081**)
- McConnell, James Spectral densities of spherical harmonics for rotational Brownian motion. (**82c:81058**)
- Mahitdinov, T. M. A method for investigating random processes in nonlinear oscillating systems. (Russian) (**82c:60105**)
- Nguen Dong An' (with K'ou The Dyk) Random oscillations in third-order systems. (Russian) (**82c:60097**)
- Nicholson, Dwight R. See Hansen, P. J., (**82c:76034**)
- Orey, Steven See Sethna, P. R., (**82f:93083**)
- Pomes, Y. A solvable problem in Poisson statistics. (**82d:82100**)
- Reznikova, A. Ja. Fluctuations of the spectrum of one-dimensional random operators. (Russian) (**82d:60114**)
- Šapiro, V. E. See Loginov, V. M., (**82j:58081**)
- Sethna, P. R. (with Orey, Steven) Some asymptotic results for a class of stochastic systems with parametric excitations. (French and German summaries) (**82f:93083**)
- Soize, Christian Oscillators submitted to squared Gaussian processes. (**82a:60089**)

34Gxx Differential equations in abstract spaces [See also 58D25.]

34G10 Linear equations [See also 47Axx, 47Bxx, 47D05.]

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- Anderson, Mary Jorgensen Convergence theorems for linear evolution equations. **82j:34060**
- Baker, Garth A. (with Dougalis, Vassilios A.; Serbin, Steven M.) An approximation theorem for second-order evolution equations. **82b:34078**
- Beirão da Veiga, Hugo Inhomogeneous evolution equations in Banach spaces with a bounded variation data. **82a:34069**
- Bittner, Ryszard (with Smentek, Zygfryd) A theorem on the existence and uniqueness of solutions for abstract, quasilinear differential equations. **82b:34077**
- Buzano, Maria Luisa (with Gobbo, Luciano) On some problems of evolution. (Italian. English summary) **82c:34067**
- Carr, Jack (with Malhardeen, M. Z. M.) Stability of nonconservative linear systems. **82b:34079**
- Colombeau, Jean-François (with Meril, A.) A remark on equations $y'' + p_1 y' + p_2 y = 0$ at an irregular singular point. **82j:34061**
- Dougalis, Vassilios A. See Baker, Garth A.; et al., **82b:34078**
- Favini, Angelo (with Venni, Alberto) On a two-point problem for a system of abstract differential equations. **82c:34080**
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- Abstract potential operator and spectral methods for a class of degenerate evolution problems. **82j:34062**
- Gaštan, L. V. The Floquet representation for equations in total derivatives. (Russian) **82c:34062**
- Gobbo, Luciano See Buzano, Maria Luisa, **82c:34067**
- Goldstein, Jerome A. (with Sandefur, James T., Jr.) Equipartition of energy for

- higher-order hyperbolic equations. **82b:34078**
- Gorbachuk, M. L. (with Kašpirovskii, O. I.) Weak solutions of differential equations in Hilbert space. (Russian) **82a:34068**
- Heyn, Eugen Lineare Evolutionsgleichungen. **82a:34082**
- Jerome, Joseph W. Convergence for operators of hyperbolic type. **82m:34061**
- Junosov, M. K. Operator equations with small parameter and nonlocal boundary conditions. (Russian) **82b:34079**
- Kanavskii, Z. I. On integral asymptotic behavior in certain boundary value problems. (Russian) **82c:34069**
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- Koblov, U. E. Regularization of an abstract Cauchy problem for a second-order operator-differential equation. (Russian) **82j:34063**
- Kočubei, A. N. Operator-differential equations in spaces of ultradistributions. (Russian) **82a:34083**
- Lomovcev, F. E. Solvability of boundary value problems for certain differential-operator equations of even order. (Russian) **82a:34084**
- Boundary value problems for differential operator equations of uneven order. (Russian) **82b:34080**
- Lopez, Manuel B^* -algebra eigenfunction expansions. **82a:34085**
- Macionis, Jonas Comment on: "The regularity of boundary conditions" [Diferencial'nye Uravnenija i Primenen.—Trudy Sem. Processy Optimal. Upravlenija I Sekcija No. 20 (1978), 17–23; MR 81a:34052]. (Russian. Lithuanian and English summaries) **82j:34064**
- Malhardeen, M. Z. M. See Carr, Jack, **82b:34079**
- Marino, Mario New contributions to the regularization of the solution of the Cauchy problem for certain second-order differential equations in Hilbert spaces. (Italian. English summary) **82c:34070**
- On the Hölderianity of the solution of the Cauchy problem by means of a second-order abstract differential equation. (Italian. English summary) **82a:34071**
- Megan, Mihail Dichotomy of linear controllable systems in Hilbert spaces. **82b:34081**
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- Murtazin, H. H. Asymptotic estimates of the resolvent and of solutions of elliptic equations. (Russian) **82i:34069**
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- Picard, Rainer Some remarks on the horizontal line method. **82c:34071**
- Piazza, Piero The equations $y' = Sy + T$ and $By' = Sy + T$ with B, S, T distributions. (Italian summary) **82m:34063**
- Popescu, Nicolae N. Necessary and sufficient conditions for exponential dichotomies in Banach spaces. **82j:34065**
- Portjanko, N. A. On conditions for the stability of solutions of linear and completely integrable equations. (Russian. English summary) **82g:34088**
- Preda, Petre See Megan, Mihail, **82m:34062**
- van der Put, Marius Meromorphic differential equations over valued fields. **82m:34064**
- Sandefur, James T., Jr. See Goldstein, Jerome A., **82c:34078**
- Serbin, Steven M. See Baker, Garth A.; et al., **82b:34078**
- Smentek, Zygfryd See Bittner, Ryszard, **82b:34077**
- Sohn, A. S. An optimal iteration method for solving evolution equations in Hilbert space. (Russian) **82f:34073**
- Sova, Miroslav On exponential growth of solutions of abstract initial value problems. (Czech summary) **82f:34074**
- Stafney, James D. A spectral mapping theorem for generating operators in second-order linear differential equations. **82a:34072**
- Suleimanov, N. M. A probability method for estimating solutions of an evolution equation. (Russian. Azerbaijani and English summaries) **82b:34082**
- Tjurin, V. M. On the dichotomy of solutions of linear differential equations with almost periodic coefficients. (Russian. Azerbaijani and English summaries) **82c:34070**
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- Differentiability of weak solutions to an abstract inhomogeneous differential equation. **82j:34059b**
- Venni, Alberto See Favini, Angelo, **82a:34070** and **82b:34080**
- Wexler, D. On frequency domain stability for evolution equations in Hilbert spaces via the algebraic Riccati equation. **82f:34075**
- Zaidman, S. Some remarks concerning regularity of solutions for abstract differential equations. **82f:34076**
- Zeitman, A. I. Some properties of solutions of differential equations with an unbounded operator in a Banach space. (Russian) **82c:34063**
- Stability of the direct Kolmogorov system with Markov perturbations of the operator of a system. (Russian) **82c:34064**

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- Abudov, A. A. (with Aslanov, G. I.) Distribution of eigenvalues of operator-differential equations of order $2n$. (Russian. Azerbaijani and English summaries) (**82c:47054**)
- Aslanov, G. I. See Abudov, A. A., (**82c:47054**)
- Bakker, N. Ju. Operator semigroups and differential equations in a Banach space. (Russian) (**82i:47058**)
- Beals, Richard An abstract treatment of some forward-backward problems of transport and scattering. (**82b:47005**)
- Botaro Aruffo, Ada Existence theorems for a minimum in the Bolza and Lagrange problems in Banach spaces. (Italian. English summary) (**82d:49007**)
- Bragg, L. R. The ascent method for abstract wave problems. (**82i:35105**)
- Brodskii, A. L. A family of operators connected with generalized shift. (Russian) (**82b:47051**)
- Ciorănescu, Ioana (with Zsidó, László) ω -ultradistributions in the abstract Cauchy problem. (**82c:47042**)
- Gerštein, L. M. (with Sobolevskii, P. E.) A new approach to the investigation of the solvability of evolution equations. (Russian. English summary) (**82d:47019**)

- Goldstein, Jerome A. Some developments in semigroups of operators since Hille-Phillips. (82i:47062)
- (Haneda, H.) See Tanabe, Hiroki. (82g:47032)
- Herod, J. V. (with McKelvey, R. W.) A Hille-Yosida theory for evolutions. (82c:47053)
- Hoang Van Lai See Sobolevskii, P. E., (82c:65066) and (82f:65064)
- Itoh, Tatsuo Hopf bifurcation of semilinear evolution equations. (82m:58017)
- Lomovcev, F. E. The method of energy inequalities in an investigation of operator equations. (Russian. English summary) (82d:47021)
- McKelvey, R. W. See Herod, J. V., (82c:47053)
- (Mugibayashi, N.) See Tanabe, Hiroki. (82g:47032)
- Nefedov, S. A. Dynamical systems with a nonexpanding domain of attainability. (Russian) (82c:49029)
- Oročko, Ju. B. The method of the operator cosine in a problem on the essential selfadjointness of a nonsemibounded symmetric operator. (Russian) (82m:47016)
- Piskarev, S. I. Approximation of holomorphic semigroups. (Russian. English summary) (82c:47047)
- Schäffe, Reinhard The connection problem for two neighboring regular singular points of general linear complex ordinary differential equations. (82a:34010b)
- Slijusarchuk, V. E. Invertibility of functional-differential operators. (Russian. English summary) (82g:47037)
- Sobolevskii, P. E. (with Hoang Van Lai) Difference schemes of optimal type for approximate solution of parabolic equations. (Russian) (82f:65064)
- (with Hoang Van Lai) Difference schemes of optimal type for the approximate solution of parabolic equations (the Banach case). (Russian) (82c:65066)
- See also Gerstein, L. M., (82d:47019)
- Sohr, Hermann Ein neues Surjektivitätskriterium im Hilbertraum. (English summary) (82c:47051)
- Tanabe, Hiroki ★Equations of evolution. (82g:47032)
- Tarnowski, Stanisław On a certain problem concerning the polyharmonic polynomials. (82j:31007)
- Turbin, A. F. Limit theorems and asymptotic expansions for singularly perturbed semigroups of operators. (Russian) (82g:47033)
- Ushijima, Teruo Note on the error estimate for the Newmark- β method applied to the second order linear evolution equation of hyperbolic type. (82g:65030)
- Webb, G. F. A representation formula for strongly continuous cosine families. (82i:47078)
- Zsidó, László See Ciorănescu, Ioana. (82c:47042)
- 34G20 Nonlinear equations [See also 47Hxx.]
- Abasov, R. G. See Mahmudov, A. P., 82a:34076
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- Arrate Peña, Manuel A uniqueness criterion for ordinary differential equations in Banach spaces. 82c:34072
- Barták, Jaroslav Stability of abstract differential equations with the right-hand side smooth in the time variable. 82m:34065
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- Bottaro Aruffo, Ada An existence and uniqueness theorem for a nonlinear differential equation. (Italian) 82c:34073
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- On bounded solutions of nonlinear ordinary differential equations. 82j:34066
- Butler, G. J. The genericity of the convergence of successive approximations in Banach spaces. 82d:34088
- Džabrailov, N. N. Stability of the zero solution of systems of differential equations in the presence of third-order dual resonance. (Russian) 82j:34067
- Džumabaev, D. S. Letter to the editors: "Reduction of boundary value problems to problems with a parameter and a justification of the shooting method" [Izv. Akad. Nauk Kazah. SSR Ser. Fiz.-Mat. 1978, no. 5, 34-40; MR 80g:34066]. (Russian) 82d:34089
- Fitzgibbon, William E. Strongly damped quasilinear evolution equations. 82h:34083
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- Ibragimov, S. I. The method of lines for a differential equation with a monotone operator in Banach space. (Russian) 82c:34066
- Jasko, F. F. Stability of differential equations in a Banach space with respect to a part of the variables. (Russian) 82h:34084
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- Kozlov, R. I. (with Matrosov, V. M.) Comparison principle in the theory of differential equations with perturbations. (Russian) 82a:34075
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- Leela, S. See Lakshmikantham, V., 82i:34072
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- Pavel, Nicolae H. (with Vrabie, Ioan I.) Flow-invariance for differential equations associated to nonlinear operators. 82c:34067
- Nonlinear evolution equations governed by f -quasidissipative operators. 82i:34073
- Portjanko, N. A. On the dependence of properties of stability and complete solvability of multidimensional differential equations on perturbations. (Russian. English summary) 82c:34070
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- Rudakov, V. P. Well-posedness of a boundary value problem for explicit and implicit differential equations in a Banach space. (Russian) 82m:34066
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- Sanekata, Nobuhiro Some remarks on quasilinear evolution equations in Banach spaces. 82d:34094
- Serapioni, Raul On quasilinear equations of hyperbolic type. (Italian summary) 82j:34070
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- Ugowski, Henryk On a certain infinite system of semilinear evolution equations. 82c:34079
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- See also Pavel, Nicolae H., 82c:34067
- Wang, Alan P. Quasilinearization of a general selfadjoint Riccati equation. 82d:34095
- Yusua, Toshio Differential equations in a locally convex space via the measure of nonprecompactness. 82m:34067
- Zaidman, S. Notes on abstract almost-periodicity. 82c:34068
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- Al-Amood, Naji See Carr, Jack., (82h:34061b)
- Amann, Herbert (with Zehnder, Eduard) Nontrivial solutions for a class of nonresonance problems and applications to nonlinear differential equations. (82h:47077)
- Asirov, S. A remark on the convergence of Tonelli approximations. (Russian) (82i:34014)
- Bai, Su Hua On the uniqueness of the generalized solution of the Cauchy problem for first-order quasilinear equations with several space variables. (Chinese) (82f:35183)
- Barbu, Viorel (with Da Prato, G.) Existence and approximation for stationary Hamilton-Jacobi equations. (82c:49040)
- Birol, Marco Almost periodicity and asymptotic behavior for the solutions of a nonlinear wave equation. (See 82d:34003)
- Carr, Jack. (with Al-Amood, Naji) Rate of decay in critical cases. II. Infinite-dimensional problems. (82h:34061b)
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- Donati, Flavio (with Matzeu, Michele) On the strong solutions of some nonlinear evolution problems in ordered Banach spaces. (Italian summary) (82a:47057)
- Furi, Massimo (with Pera, Maria Patrizia) An elementary approach to boundary value problems at resonance. (82a:47058)
- Gallouët, Thierry (with Kavian, Otared) Deux exemples de résultats d'existence et de nonexistence pour des problèmes demi-linéaires à l'infini. (English summary) (82a:35072)
- Kamaev, D. A. Hyperbolic limit sets of evolution equations and the Galerkin method. (Russian) (82c:58080)
- Kavian, Otared See Gallouët, Thierry, (82a:35072)
- Klepyn, A. F. See Vladimirov, A. A.; et al., (82h:73035)
- Kobayashi, Yoshikazu Nonlinear evolution operators in Banach spaces. (82a:47063)
- Kozjakin, V. S. See Vladimirov, A. A.; et al., (82h:73035)
- Krasnosel'skii, M. A. See Vladimirov, A. A.; et al., (82h:73035)
- Lifschitz, E. A. See Vladimirov, A. A.; et al., (82h:73035)
- Matzeu, Michele See Donati, Flavio, (82a:47057)
- Moroşanu, Gheorghe Regularity of solutions of variational inequalities in Hilbert spaces. (82a:47059)

- Negrini, Piero (with Tesi, Alberto) Attractivity and Hopf bifurcation in Banach spaces. (82i:58068)
- Pera, Maria Patrizia See Furi, Massimo, (82a:47058)
- Perlov, N. V. On the Green functions of classical dynamical systems. (Russian) (82i:82010)
- Pokrovskii, A. V. See Vladimirov, A. A.; et al., (82b:73035)
- Prusaka, Tadeusz An operational equation and differential equations with multivalued nonconvex right-hand side. (82b:34016)
- Ramm, Alexander G. Existence, uniqueness and stability of solutions to some nonlinear oscillations problems. (82b:34055)
- Rios, Hélène Une étude d'existence sur certains problèmes paraboliques. (English summary) (82b:47042)
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- Schechter, Eric Evolution generated by continuous dissipative plus compact operators. (82b:47060)
- Strakraba, I. See Vejvoda, O., (82g:47043)
- Tesi, Alberto See Negrini, Piero, (82i:58068)
- Vejvoda, O. (with Strakraba, I.) Perturbed nonlinear abstract equations. (82g:47043)
- Vladimirov, A. A. (with Klepčyn, A. F.; Kojakin, V. S.; Krasnosel'skii, M. A.; Lifšic, E. A.; Pokrovskii, A. V.) Vector hysteresis nonlinearities of the von Mises-Tresca type. (Russian) (82b:73035)
- Vrabie, Ioan I. Compactness methods and flow-invariance for perturbed nonlinear semigroups. (82b:47101)
- von Wahl, Wolf On nonlinear evolution equations in a Banach space and on nonlinear vibrations of the clamped plate. (82i:35006)
- White, Warren H. A global existence theorem for Smoluchowski's coagulation equations. (82c:34014)
- Zehnder, Eduard See Amann, Herbert, (82b:47077)

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- Arai, Tsutomu On degenerate nonlinear evolution equations. 82i:34076
- Ishii, Hitoshi Remarks on evolution equations with almost periodic forcing terms. 82j:34071
- Piccinini, Livio C. G-convergence and evolution problems. 82j:34072

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- Colombeau, Jean-François (with Perrot, B.; Dwyer, T. A. W., III) On the solvability of differential equations of infinite order in nonmetrizable spaces. (82m:34011)
- Dwyer, T. A. W., III See Colombeau, Jean-François; et al., (82m:34011)
- Perrot, B. See Colombeau, Jean-François; et al., (82m:34011)
- Pierre, Michel Evolution equations with irregular obstacles. (82j:35000)
- Turinici, Mihai Differential inequalities via maximal element techniques. (82g:34014)

34H05 Control problems [See also 49-XX, 93-XX.]

- Grasse, Kevin A. Perturbations of nonlinear controllable systems. 82c:34080
- Janin, R. (with Sentis, Rémi) Existence of an optimal feedback control in a control problem. 82a:34078
- Nakonečnii, O. G. Minimax estimations of parameters. (Russian. English summary) 82a:34079
- Nguyen Dong An Some methods for integrating Fokker-Planck-Kolmogorov equations in the theory of random oscillations. (Russian) 82f:34077
- Prihod'ko, A. P. (with Rabah, R.) Some properties of linear controllable equations in infinite-dimensional spaces. (Russian) 82f:34078
- Rabah, R. Exact controllability and stabilization in infinite-dimensional spaces. (Russian) 82f:34079
- See also Prihod'ko, A. P., 82f:34078
- Sentis, Rémi See Janin, R., 82a:34078
- Tonkov, E. L. Dynamical systems of translations and the questions of uniform controllability of a linear system. (Russian) 82f:34080

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- Allahverdiyev, Dž. E. (with Šapiro, A. V.) Conditions for the complete controllability of linear systems in Banach spaces. (Russian. Azerbaijani and English summaries) (82a:93010)
- Anichini, Giuseppe Global controllability of nonlinear control processes with prescribed controls. (82g:93005)
- Baitmans, M. Domains of controllability for the van der Pol equation. (Russian) (82c:93006)
- Balasubramanian, R. Stability of limit cycles in feedback systems containing a relay. (82c:93081)
- Bell, D. J. (with Bryant, G. F.; Cook, P. A.; Crossley, T. R.; Denham, M. J.; Fallside, F.; Luntz, R.; MacFarlane, Alistair G. J.; Mayne, D. Q.; Munro, N.; Owens, D. H.; Rosenbrock, H. H.; Storey, Colin) ★Modern approaches to control system design. (82f:93060)
- Bressan, Alberto On two conjectures by Hájek. (82b:49057)
- Bryant, G. F. See Bell, D. J.; et al., (82f:93060)
- Callier, Frank M. (with Willems, Jacques L.) Criterion for the convergence of the solution of the Riccati differential equation. (82m:49023)
- Cook, P. A. See Bell, D. J.; et al., (82f:93060)
- Crossley, T. R. See Bell, D. J.; et al., (82f:93060)
- Denham, M. J. See Bell, D. J.; et al., (82f:93060)
- Emel'janov, S. V. (with Korovin, S. K.) Control systems with variable structure. (Russian) (82g:93026)
- Fallside, F. See Bell, D. J.; et al., (82f:93060)
- Favini, Angelo On stabilizability of some abstract degenerate diffusion processes. (82b:93029)

- Foss, A. M. Criterion to assess stability of a "lowest wins" control strategy. (82c:93079)
- Glushko, Ju. V. See Ževnin, A. A., (82i:93014)
- Hadeier, K. P. (with de Mottoni, P.; Schumacher, Konrad) Dynamic models for animal orientation. (82m:92024)
- Has'minskii, R. Z. ★Stochastic stability of differential equations. (82b:60064)
- Hiriş, Viorel (with Megan, Mihail) Hyperstability for linear parabolic systems. (82c:93080)
- Johnson, C. D. The phenomenon of homeopathic instability in dynamical systems. (82d:93050)
- Korobov, V. I. (with Nguen Hoa Son) Controllability of linear systems in a Banach space in the presence of constraints on the control. I. (Russian) (82b:93007a)
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- Korovin, S. K. See Emel'janov, S. V., (82g:93026)
- Kremlev, A. G. Control of a quasilinear system under indeterminate initial conditions. (Russian) (82a:49025)
- Larin, V. B. On the weak control of slowly damped systems. (82i:49015)
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- Luntz, R. See Bell, D. J.; et al., (82f:93060)
- MacFarlane, Alistair G. J. See Bell, D. J.; et al., (82f:93060)
- Maigarin, B. Z. ★Устойчивость и качество процессов нелинейных систем автоматического управления. (Russian) [Stability and quality of processes of nonlinear automatic control systems] (82g:93033)
- Mayne, D. Q. See Bell, D. J.; et al., (82f:93060)
- Megan, Mihail Dichotomy of linear controllable systems in Hilbert spaces. (82b:34081)
- See also Hiriş, Viorel, (82c:93080)
- de Mottoni, P. See Hadeier, K. P.; et al., (82m:92024)
- Munro, N. See Bell, D. J.; et al., (82f:93060)
- Nguyen Hoa Son See Korobov, V. I., (82b:93007)
- Onopukh, Ju. N. Simulation of the control process for superficial respiration and blood flow in the human organism. (82c:92016)
- Owens, D. H. See Bell, D. J.; et al., (82f:93060)
- Pandolfi, Luciano Output stabilization of a class of boundary value control systems. (82c:93018)
- Poggio, T. (with Reichardt, W.) Visual fixation and tracking by flies: mathematical properties of simple control systems. (82c:92019)
- Popov, E. P. (with Timofeev, A. V.) The principle of high-speed control in the problem of analytic synthesis of stabilization automata. (Russian) (82i:93062)
- Postnikov, N. S. (with Sabaev, E. F.) Matrix comparison systems and their applications to automatic control problems. (82i:93053)
- Prihod'ko, A. P. Sets of attainability in Banach space. (Russian) (82b:93011)
- Rabah, R. Relative controllability of linear differential equations with lag in Banach space. (Russian) (82c:34094)
- Reichardt, W. See Poggio, T., (82c:92019)
- Rosenbrock, H. H. See Bell, D. J.; et al., (82f:93060)
- Sabaev, E. F. See Postnikov, N. S., (82i:93053)
- Šapiro, A. V. See Allahverdiyev, Dž. E., (82a:93010)
- Schumacher, Konrad See Hadeier, K. P.; et al., (82m:92024)
- Solak, Marek K. A differential representation for multivariable linear systems with disturbances. (82m:93059)
- Stern, Ronald J. Asymptotic holdability. (82k:93017)
- Storey, Colin See Bell, D. J.; et al., (82f:93060)
- Susolkin, V. I. Existence of a solution of a nonlinear integral equation of the first kind. (Russian) (82c:45009)
- Timofeev, A. V. See Popov, E. P., (82i:93062)
- Ulanov, G. M. Method of isochronous pointwise transformations in the theory of systems with variable structure. I. (82k:34056a)
- Method of isochronous pointwise transformations in the theory of systems with variable structure. II. (82k:34056b)
- Willems, Jacques L. See Callier, Frank M., (82m:49023)
- Ževnin, A. A. (with Glushko, Ju. V.) Synthesis of an algorithm for the control of nonlinear nonstationary objects on the basis of the inverse problem of dynamics. (Russian) (82i:93014)
- Zabov, V. I. ★Теория уравнений управляемого движения. (Russian) [Theory of equations of a controllable motion] (82i:34002)

34Kxx Functional-differential and differential-difference equations, with or without deviating (or retarded) arguments

- (Mitropol'skii, Ju. A.) See Qualitative investigations of functional differential equations, 82c:34070
- (Sarkovskii, O. M.) See Investigation of differential and difference-differential equations, 82c:34069 and Qualitative investigations of functional differential equations, 82c:34070
- Differential equations ★Исследование дифференциальных и дифференциально-разностных уравнений. (Russian) [An investigation of differential and differential-difference equations] 82c:34069
- Functional-differential equations ★Качественное исследование дифференциально-функциональных уравнений. (Russian) [Qualitative investigation of functional differential equations] 82c:34070
- Investigation of differential and difference-differential equations ★Исследование дифференциальных и дифференциально-разностных уравнений. (Russian) [An investigation of differential and differential-difference equations] 82c:34069
- Qualitative investigations of functional differential equations ★Качественное исследование дифференциально-функциональных уравнений. (Russian) [Qualitative investigation of functional differential equations] 82c:34070

secondary classifications:

- (Kappel, F.) See **Abstract Cauchy problems and functional differential equations**, (82d:34001)
- (Schappacher, Wilhelm) See **Abstract Cauchy problems and functional differential equations**, (82d:34001)
- Abstract Cauchy problems and functional differential equations** ★ **Abstract Cauchy problems and functional differential equations**, (82d:34001)
- Functional-differential equations** ★ **Abstract Cauchy problems and functional differential equations**, (82d:34001)
- Leibnitz** ★ **Abstract Cauchy problems and functional differential equations**, (82d:34001)
- Workshop:**
- Functional Differential Equations and Nonlinear Semigroups** ★ **Abstract Cauchy problems and functional differential equations**, (82d:34001)

34K05 General theory

- Aleskerov, A. G. (with Aliev, Rašid Musa) On the convergence of successive Seidel approximations for solving systems of ordinary differential equations with advanced argument. (Russian, Azerbaijani and English summaries) 82k:34072
- Aliev, Rašid Musa See Aleskerov, A. G., 82k:34072
- Bainov, D. D. See Hristova, S. G., 82k:34077
- Barszcz, Marek On equivalence relations for linear differential-difference systems. 82c:34081
- Bélair, Jacques Sur une équation différentielle fonctionnelle analytique. 82c:34071
- Bulgakov, A. I. (with Maksimov, V. P.) Functional and functional-differential inclusions with Volterra operators. (Russian) 82j:34073
- Burns, John A. (with Herdman, Terry L.; Stech, Harlan W.) The Cauchy problem for linear functional-differential equations. 82g:34090
- Campbell, Stephen L. Singular linear systems of differential equations with delays. 82a:34080
- Chambers, L. G. Some properties of the functional-differential equation $b_0 y'(x) + \int_0^x b(u) y'(\mu^u x) du = a_0 y(x) + \int_0^x a(u) y(\mu^u x) du$. 82k:34073
- Deo, S. G. See Joshi, S. R., 82d:34097
- Djandženko, Ju. A. Boundary cases under conditions of solvability of the Cauchy problem for an equation of neutral type. (Russian) 82k:34074
- Dłotko, Tadeusz Solutions of ordinary differential equations with deviated argument, satisfying additional conditions. 82f:34081
- Dudka, N. A. (with Šuvar, B. A.) Two-sided differential inequalities with deviating argument. (Russian) 82h:34086
- Fečenko, T. S. See Romanenko, O. Ju., 82m:34068
- Hamedani, G. G. Global existence of solutions of certain functional-differential equations. 82f:34082
- Henry, Myron S. (with Wiggins, K.) Approximation theory methods for linear and nonlinear differential equations with deviating arguments. 82f:34083
- Herdman, Terry L. See Burns, John A.; et al., 82g:34090
- Hohlova, E. K. See Šimanov, S. N., 82c:34075
- Hristova, S. G. (with Bainov, D. D.) Globally bounded solutions of a class of integro-differential equations with deviating argument. (Russian. Romanian summary) 82k:34077
- Joshi, S. R. A system of abstract measure delay differential equations. 82d:34096
- (with Deo, S. G.) On abstract measure delay differential equations. 82d:34097
- Kamont, Zdzisław On the Chaplygin method for differential-functional equations. 82c:34072
- Karakostas, G. Expression of solutions of linear differential equations of retarded type. (Italian summary) 82g:34091
- Kuhtenkov, L. P. (with Ruban, A. I.) The sensitivity of discontinuous systems described by differential-difference equations with lagging argument. 82h:34087
- Kurdevanidze, G. D. Asymptotic behavior of a solution of the Cauchy problem for systems of differential equations with small lag. (Russian) 82b:34088
- Litvince, P. D. Polynomial approximation of the solution of the fundamental initial problem for some differential equations with retarded argument. (Russian) 82c:34082
- Magomedov, A. R. Investigation of the solutions of linear differential equations with maxima. (Russian, Azerbaijani and English summaries) 82c:34073
- Maksimov, V. P. See Bulgakov, A. I., 82j:34073
- Manitius, A. Completeness and F -completeness of eigenfunctions associated with retarded functional differential equations. 82d:34098
- Mikolajski, Z. Sur le prolongement à gauche de l'intégrale d'une équation différentielle à paramètre retardé. 82h:34089
- Naito, Toshiki Fundamental matrices of linear autonomous retarded equations with infinite delay. 82f:34084
- Neuman, František On transformations of differential equations and systems with deviating argument. 82c:34074
- Privat'skii, V. B. The Cauchy problem for systems with the simplest hysteresis nonlinearities. (Russian) 82k:34075
- Rodkina, A. E. Continuity and uniqueness of generalized solutions of equations of neutral type. (Russian) 82d:34099
- Romanenko, O. Ju. (with Fečenko, T. S.) The asymptotic behavior of solutions of functional-differential equations of neutral type in the neighborhood of a critical point. (Russian) 82m:34068
- Ruban, A. I. See Kuhtenkov, L. P., 82b:34087
- Samilov, A. H. Smoothness of some special operators. (Russian, Azerbaijani and English summaries) 82a:34081
- On differentiable dependence of the solution of a ballistic problem on initial data. (Russian, Azerbaijani and English summaries) 82k:34076
- Serebrjakova, I. V. Transformation of variable deviation of an argument into a constant. (Russian) 82i:34078
- Šimanov, S. N. (with Hohlova, E. K.) Construction of linear functionals for systems with aftereffect. (Russian) 82c:34075
- Sinha, A. S. C. Special matrix solution for functional-differential systems with infinite delays. 82f:34085

- Skripnik, V. P. Degenerate linear differential equations. (Russian, Kazakh summary) 82f:34086
- Solodov, A. V. (with Solodova, E. A.) ★ Системы с переменным запаздыванием. (Russian) [Systems with variable lag] 82f:34087
- Solodova, E. A. See Solodov, A. V., 82f:34087
- Starč, Zdravko F. Linearization of a nonlinear functional-differential equation. 82a:34082
- Stech, Harlan W. See Burns, John A.; et al., 82g:34090
- Šuvar, B. A. See Dudka, N. A., 82h:34086
- Švitra, Donatas On the localization of the roots of a quasipolynomial. (Russian, Lithuanian and English summaries) 82d:34100
- Szarski, J. Infinite systems of first-order partial-differential functional inequalities. 82h:34087
- Trybuk, Viāclav The most general transformation of homogeneous linear differential retarded equations of the first order. 82f:34088
- Turincel, Mihai Time-dependent invariant polygonal domains for a class of functional-differential equations. 82i:34079
- Vogl, Fritz Über eine Integraldarstellung der ganzen Lösungen der Funktional-Differentialgleichungen $\sum_{k=0}^n a_k D^k y(\lambda^{n-k} x) = f(x)$. 82h:34088
- Über ein System linearer Funktional-Differentialgleichungen. (English and Russian summaries) 82i:34080
- Wiggins, K. See Henry, Myron S., 82f:34083

secondary classifications:

- Bulgakov, A. I. Kneser's theorem for a class of integral inclusions. (Russian) (82h:34014)
- Carvalho, L. A. V. On the continuation to the left of solutions of an integro-differential equation. (82d:450*)
- Cuff, W. R. See Readshaw, J. L., (82d:92034)
- Hearon, John Z. Transient times in enzyme and coupled enzyme systems. (82m:92028)
- Kasymov, K. A. Estimates of solutions of linear singularly perturbed second-order integro-differential equations. (Russian, Kazakh summary) (82d:45008)
- Kimmel, M. Integro-differential equations in cellular populations dynamics. (82a:92029)
- Li, Guang Yuan See Song, Jian; et al., (82f:92039)
- MacCamy, R. C. A population model with nonlinear diffusion. (82g:92035)
- Masi, G. S. Conditions for balanced polymorphism in the presence of differential delay in developmental time. (82m:92050)
- Murray, John Lumped-distributed networks and differential-delay systems. (82h:93018)
- Przeworska-Rolewicz, Danuta ★ Shifts and periodicity for right invertible operators. (82d:47012)
- Readshaw, J. L. (with Cuff, W. R.) A model of Nicholson's blowfly cycles and its relevance to predation theory. (82g:92034)
- Schiavino, Andrea (with Tesi, Alberto) On the asymptotic stability for abstract Volterra integro-differential equations. (Italian summary) (82g:45025)
- Song, Jian (with Yu, Jing Yuan; Li, Guang Yuan) Theory on prospect of population evolution processes. (82f:92039)
- Stanković, Miodir S. Semidiscrete transform. (82d:44006)
- Tesi, Alberto See Schiavino, Andrea, (82g:45025)
- Turincel, Mihai Multivalued contractions and applications to functional-differential equations. (82h:54083)
- Vu Kuok Han' (with Zabello, L. E.) On the controllability of time-dependent systems with aftereffect. (Russian, English summary) (82f:93013)
- Webb, G. F. A deterministic diffusive epidemic model with an incubation period. (82g:92058)
- Yu, Jing Yuan See Song, Jian; et al., (82f:92039)
- Zabello, L. E. See Vu Kuok Han', (82f:93013)

34K10 Boundary value problems

- Agarwal, Ravi P. Boundary value problems for differential equations with deviating arguments. 82k:34077
- Aliev, G. F. See Aliev, Rašid Musa, 82g:34092
- Aliev, Rašid Musa (with Aliev, G. F.) A certain approximate solution of boundary value problems for ordinary differential equations with deviating argument. (Russian, Azerbaijani and English summaries) 82g:34092
- Bainov, D. D. See Nikolova, T. St., 82k:34081
- Brîc, I. V. See Kováč, Ju. I., 82k:34078
- Dłotko, Tadeusz On some applications of vector fields to differential equations with deviated argument. 82h:34089
- Dražhin, M. E. (with Pilyevskaja, T. K.) Well-posedness of boundary value problems for functional-differential equations. (Russian) 82b:34090
- Kamenski, Mihai See Kazakova, Nedjalka, 82m:34069
- Kazakova, Nedjalka (with Kamenski, Mihai) Normal solvability of a boundary value problem for functional-differential equations of neutral type. (Bulgarian, Russian and English summaries) 82m:34069
- Kováč, Ju. I. (with Brîc, I. V.) Investigation of a nonlinear boundary value problem by the analytic two-sided method. (Russian) 82k:34078
- Nikolova, T. St. (with Bainov, D. D.) A boundary value problem for an infinite system of differential equations. (Russian) 82k:34081
- Ntouyas, S. K. See Sficas, Y. G., 82c:34076
- Pilyevskaja, T. K. See Dražhin, M. E., 82b:34090
- Ponomarev, V. D. Connections of the solvability of two boundary value problems with functional boundary conditions for second-order functional-differential equations. (Russian) 82h:34090
- Rankin, Samuel M., III Boundary value problems for partial functional differential equations. 82h:34091
- Rodkina, A. E. The Cauchy problem for an equation of neutral type. (Russian) 82f:34089
- Sficas, Y. G. (with Ntouyas, S. K.) A boundary value problem for n th order functional differential equations. 82c:34076

secondary classifications:

- Denisenko, P. M. A numerical-analytic algorithm for the solution of boundary value problems for differential equations with deviating argument. (Russian) **82j:65053**

34K15 Qualitative theory

- Angelov, V. G. Bounded solutions of functional-differential equations of the superneutral type. **82h:34079**
- Arino, O. (with Séguier, P.) Existence of oscillating solutions for certain differential equations with delay. **82m:34070**
- Arohska, M. At. (with Bainov, D. D.) On periodic solutions of a neutral type equation. **82h:34092**
(with Bainov, D. D.) Periodic solutions of equations of neutral type. (Russian) **82g:34093**
- Bainov, D. D. See Zahariev, Andrei, **82a:34090**; Arohska, M. At., **82h:34092** and **82g:34093**
- Barszcz, Marek On equivalence relations for linear differential-difference systems. **82f:34090**
- Bastin, H. (with Delchambre, M.) Influence de l'introduction d'un terme d'amortissement à argument retardé dans l'équation de van der Pol. **82g:34094**
- Bigun, Ja. I. A method of averaging in systems with lag, containing slow and fast motions. (Russian) **82g:34095**
- Bobrowski, Dobiesław (with Werbowski, Jarosław) On oscillation behaviour of functionally bounded solutions of nonlinear differential equations with deviating argument. **82h:34091**
- Brands, J. J. A. M. Asymptotics of a nonlinear delay differential equation. **82h:34093**
- Casal Piga, Alfonso (with Somolinos, Alfredo S.) Analytic and numerical study of the equation of the sunflower. (Spanish) **82g:34096**
- Chen, Lu San On oscillatory property of bounded solutions of functional-differential equations. (Italian summary) **82g:34097**
(with Yeh, Chih Chih) Oscillations of n th order functional-differential equations with perturbations. (Italian summary) **82c:34083**
(with Yu, Fong Ming) On oscillatory and asymptotic behavior of the solutions of n th order retarded differential equations. **82c:34077**
- Cockburn, Bernardo See Ruiz-Claeyssen, Julio, **82a:34087**
- (Dahiya, R. S.) See Sztiba, Urszula, **82f:34094**
- Delchambre, M. See Bastin, H., **82g:34094**
- Derfel, G. A. Asymptotic properties of the solutions of some linear functional-differential equations. (Russian. Georgian and English summaries) **82h:34094**
- Doden, Klaus The region of attraction of the zero solution of $y'(t) = -(y(t-1))^{2m+1}$. **82h:34093**
- Donskaja, N. V. (with Norkin, S. B.) Behavior of solutions of a homogeneous initial problem for second-order differential equations with retarded argument in the neighborhood of a singular point. (Russian) **82h:34094**
- Duška, N. A. (with Šušar, B. A.) On bilateral differential inequalities for differential equations with deviating argument. (Russian. English summary) **82c:34078**
- Fischer, Alexander Existence of almost periodic solutions of systems of linear and quasilinear differential equations with time lag. (Czech summary) **82c:34082**
- Furumochi, Tetsuo Existence of periodic solutions of periodic nonlinear functional-differential equations. **82m:34071**
- Futak, Jan Asymptotic behavior of solutions of higher-order functional-differential equations. (Russian. Georgian and English summaries) **82h:34095**
- Golfer, Ja. M. Bifurcations and stability of neutral systems in the neighborhood of third order resonance. **82m:34072**
- Graef, John R. (with Grammatikopoulos, Myron K.; Spikes, Paul W.) Oscillatory behaviour of differential equations with deviating arguments. **82i:34083**
(with Grammatikopoulos, Myron K.; Spikes, Paul W.) Growth and oscillatory behavior of solutions of a differential equation with a deviating argument. **82h:34096**
(with Grammatikopoulos, Myron K.; Spikes, Paul W.) Asymptotic and oscillatory behavior of superlinear differential equations with deviating arguments. **82c:34084**
(with Spikes, Paul W.) On the asymptotic behavior of solutions of second order nonlinear delay equations. **82g:34098**
- Grammatikopoulos, Myron K. Correction on the paper: "A criterion for the existence of bounded nonoscillatory solutions for nonlinear retarded differential equations" [Ann. Mat. Pura Appl. (4) **120** (1979), 25–34; MR **80j:34093**]. **82a:34083**
See also Graef, John R.; et al., **82c:34084**; **82h:34096** and **82i:34083**
- Gricai, A. G. See Ševelo, V. M.; et al., **82j:34075**
- Grossman, Zvi Oscillatory phenomena in a model of infectious diseases. **82h:34095**
- Hino, Yoshiyuki Almost periodic solutions of functional differential equations with infinite retardation. II. **82c:34079**
- Invernizzi, Sergio (with Zanolin, Fabio) An existence theorem of periodic solutions of functional-differential equations. (Italian summary) **82a:34084**
- Israfilov, R. H. (with Sibgatullin, G. H.) Asymptotic behavior of solutions of a second-order differential equation with retarded argument. (Russian) **82h:34096**
- Kahn, Peter B. See Lin, Juan, **82i:34087**
- Kalinowski, J. Differential equations with iterates of unknown function. **82c:34080**
- Kisilewicz, Michał On the trajectories of generalized functional-differential systems of neutral type. **82h:34097**
- Kitamura, Yuichi (with Kusano, Takasi) Nonlinear oscillation of higher-order functional-differential equations with deviating arguments. **82a:34085**
- Kolwara, S. Periodic solutions of systems of two ordinary differential equations with deviation. (Russian) **82h:34080**
- Kolesov, Ju. S. A method of normal forms for systems with lag. (Russian. Lithuanian and English summaries) **82c:34085**
- Koplatadze, R. G. Monotone solutions of first-order nonlinear differential equations with retarded argument. (Russian. Georgian and English summaries) **82g:34099**
Asymptotic behavior of the solutions of second-order linear differential equations with retarded argument. (Russian) **82h:34097**
- Kozakiewicz, Erwin (with Morgenthal, Klaus) Über die final positiven Lösungen einer Differentialgleichung zweiter Ordnung mit Nachwirkung. **82c:34081**
- Kurpel', M. S. (with Migović, F. M.) Two-sided inequalities for functional-differential equations, given in implicit form, and their applications. (Russian) **82i:34084**
- Kusano, Takasi (with Naito, Manabu) Comparison theorems for functional-differential equations with deviating arguments. **82i:34085**
See also Kitamura, Yuichi, **82a:34085** and Singh, Bhagat, **82a:34088**
- Le Swan Kan Quasiperiodic solutions of linear systems with lag. (Russian) **82g:34100**
Asymptotic expansions of quasiperiodic solutions in quasilinear autonomous systems with lag. (Russian) **82f:34091**
Quasiperiodic oscillations of quasilinear systems with autonomous autoregulated delay. (Russian) **82d:34101**
Quasiperiodic oscillations in quasilinear autonomous systems with lag. (Russian) **82c:34082**
On quasiperiodic solutions of a nonlinear nonautonomous system with lag in the presence of resonance. (Russian) **82i:34086**
- Lin, Juan (with Kahn, Peter B.) Averaging methods in the delayed-logistic equation. **82i:34087**
- Magomedov, A. R. (with Rjabov, Ju. A.) Periodic solutions of linear systems of differential equations with "maxima". (Russian. Azerbaijani and English summaries) **82h:34098**
On an investigation of linear differential equations with maxima. (Russian. Azerbaijani and English summaries) **82g:34101**
On the periodic solutions of a system of differential equations with maxima with a small parameter. (Russian. Azerbaijani and English summaries) **82g:34102**
- Maistrenko, Ju. L. (with Romanenko, O. Ju.; Šarkov'skii, O. M.) The qualitative behavior of solutions of quasilinear differential-difference equations. (Russian) **82g:34103**
A theorem on the preservation of asymptotically periodic solutions of differential-difference equations that are close to completely integrable ones. (Russian) **82h:34081**
 C^k -solutions of linear functional-differential equations with linear-fractional transformation of the argument. (Russian) **82f:34092**
- Marušak, Pavol Oscillation criteria for the solutions of n th-order differential equations with lag. (Russian) **82d:34102**
- Migović, F. M. See Kurpel', M. S., **82i:34084**
- Molova, K. G. Periodic solutions of quasilinear autonomous second-order differential equations with retarded argument in the resonance case. (Bulgarian. Russian and English summaries) **82h:34096**
(with Rjabov, Ju. A.) Periodic solutions of a quasilinear autonomous system with retarded argument in the resonance case. (Russian) **82h:34082**
- Morgenthal, Klaus See Kozakiewicz, Erwin, **82c:34081**
- Naito, Manabu See Kusano, Takasi, **82a:34085**
- Norkin, S. B. See Donskaja, N. V., **82h:34094**
- Onose, Hiroshi Nonlinear oscillation of functional-differential equations with complicated deviating argument. **82j:34074**
- Parrott, Mary E. Convergence of solutions of differential equations with infinite delay. **82h:34099**
- Pesin, Ja. B. Stability and periodic solutions of some systems of differential equations with lag. (Russian) **82f:34093**
- Philos, Ch. G. (with Stakos, V. A.) Boundedness and oscillation of solutions of differential equations with deviating argument. **82c:34083**
Oscillatory and asymptotic behavior of strongly superlinear differential equations with deviating arguments. **82c:34084**
A comparison result for retarded differential equations. **82a:34086**
- Piłka, Marek A remark about the periodic solution of the system of n differential equations with deviating argument. **82h:34100**
- Plant, Richard E. A FitzHugh differential-difference equation modeling recurrent neural feedback. **82g:34104**
- Popov, A. M. Comparison theorems for equations of neutral type and estimates of solutions. (Russian) **82i:34088**
- Rjabov, Ju. A. See Magomedov, A. R., **82h:34098** and Molova, K. G., **82h:34082**
- Rodrigues, Hildebrando M. On growth and decay of solutions of perturbed retarded linear equations. **82h:34101**
- Romanenko, O. Ju. See Maistrenko, Ju. L.; et al., **82g:34103**
- Ruiz-Claeyssen, Julio (with Cockburn, Bernardo) Applications of the integral averaging bifurcation method to retarded functional-differential equations. **82a:34087**
The integral-averaging bifurcation method and the general one-delay equation. **82h:34092**
- Rybakowski, Krzysztof P. A topological principle for retarded functional-differential equations of Carathéodory type. **82h:34102**
- Šarkov'skii, O. M. See Maistrenko, Ju. L.; et al., **82g:34103**
- Sawano, Kensuke Positively invariant sets for functional differential equations with infinite delay. **82h:34099**
- Schmitt, Klaus Oscillations in nonlinear differential-delay equations. **82h:34103**
- Séguier, P. See Arino, O., **82m:34070**
- Šemjakina, L. M. On the question of substantiating the averaging method for a type of differential equations with deviating argument. (Russian) **82c:34086**
- Ševelo, V. M. (with Varch, N. V.; Gricai, A. G.) Investigation of oscillation properties of solutions of systems of differential and differential-difference equations (survey). (Russian) **82j:34075**
- Sibgatullin, G. H. See Israfilov, R. H., **82h:34096**
- Singh, Bhagat (with Kusano, Takasi) On asymptotic limits of nonoscillations in functional equations with retarded arguments. **82a:34088**
Nonoscillation of forced Liénard type functional equations. **82a:34089**
Oscillation in second order functional equations with deviating arguments. **82h:34089**
See also Sztiba, Urszula, **82f:34094**
- Šoltes, Pavel Oscillatory properties of solutions of second-order nonlinear delay differential equations. (Russian summary) **82c:34085**

- Somolinos, Alfredo S. See Casal Piga, Alfonso, 82g:34096
- Spikes, Paul W. See Graef, John R.; et al., 82c:34084; 82g:34098; 82h:34096 and 82f:34083
- Stakos, V. A. Basic results on oscillation for differential equations with deviating arguments. 82c:34087
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- Angelov, V. G. (with Bainov, D. D.) Existence and uniqueness of the global solution of certain integral-functional equations. (Russian) (82c:45015)
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- Banks, S. P. An abstract setting for nonlinear distributed multipass processes. (82m:93052)
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- Astrovskii, A. I. (with Gurina, T. N.) Complete controllability of systems with aftereffect in a class of Čebyšev functions. (Russian. English summary) (82c:93002)
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- Gurtin, Morton E. (with Murphy, Lea F.) On the optimal harvesting of age-structured populations: some simple models. (82i:92024)
- Hristov, Nikolai D. See Konstantinov, Mihail M.; et al., (82g:34108)
- Klamka, J. Controllability of nonlinear systems with delays in control. (82d:93012)
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- Konstantinov, Mihail M. (with Petkov, Petko Hr.; Patarinski, Simeon P.; Hristov, Nikolai D.) Stabilization of linear differential delayed systems via the Ljapunov direct method. (Polish and Russian summaries) (82g:34108)
- Manitius, A. Necessary and sufficient conditions of approximate controllability for general linear retarded systems. (82g:93008)
- Mansimov, K. B. Optimality of singular (in the classical sense) controls in systems with lag. (Russian. Azerbaijani and English summaries) (82h:49034)
- Martin, Robert H., Jr. Asymptotic behavior of solutions to a class of quasimonotone functional-differential equations. (82f:34104)
- Mereža, V. L. On the controllability of systems with delay. (Russian) (82f:93011)
- Murphy, Lea F. See Gurtin, Morton E., (82i:92024)
- Olbrot, Andrzej W. (with Żak, Stanisław H.) Sufficient and necessary conditions for spectral controllability and observability of linear retarded systems. (82c:49030)
- (with Żak, Stanisław H.) Controllability and observability problems for linear functional-differential systems. (See 81j:34005)
- Patarinski, Simeon P. See Konstantinov, Mihail M.; et al., (82g:34108)
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- Škijar, B. Š. On observability of linear systems with concentrated delays. (Russian. English summary) (82f:93016)
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- Muljarek, V. V. On solution of some observation problems in hereditary systems. (82c:93017)
- Prajneshu. A stochastic prey-predator model with time delay. (82f:92037)

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35-01 Elementary exposition, textbooks

- Antonova, A. M. (with Glušchenko, A. A.; Gončarenko, V. M.; Kapšiv, O. O.; Paharëva, N. O.; Čemeris, V. S.) ★Основы теории уравнений с частными производными. Часть I. (Russian) [Foundations of the theory of partial differential equations. Part I] 82g:35001a
- (with Glušchenko, A. A.; Gončarenko, V. M.; Kapšiv, O. O.; Paharëva, N. O.; Čemeris, V. S.) ★Основы теории уравнений с частными производными. (Russian) [Foundations of the theory of partial differential equations] 82g:35001b
- Bicadze, A. V. ★Equations of mathematical physics. 82a:35001
- Budak, B. M. (with Samarskii, A. A.; Tihonov, A. N.) ★Сборник задач по математической физике. (Russian) [A collection of problems in mathematical physics] 82a:35002
- Čemeris, V. S. See Antonova, A. M.; et al., 82g:35001
- Duistermaat, J. J. ★Classical aspects of partial differential equations. 82g:35002
- Glušchenko, A. A. See Antonova, A. M.; et al., 82g:35001
- Gončarenko, V. M. See Antonova, A. M.; et al., 82g:35001

- Kapšiv, O. O. See Antonova, A. M.; et al., 82g:35001
- Laval, Pierre. ★Théorie et méthodes numériques de résolution des équations aux dérivées partielles. (French) [Theory and numerical methods of solution of partial differential equations] 82d:35001
- Mihailov, V. P. ★Partial differential equations. 82a:35003a
- ★Equations aux dérivées partielles. (French) [Partial differential equations] 82a:35003b
- Orlov, Konstantin. Common general practical method for solving ordinary and partial differential equations. 82d:35002
- Paharëva, N. O. See Antonova, A. M.; et al., 82g:35001a and Antonova, A. M.; et al., 82g:35001b
- (Petrova, Irina) See Mihailov, V. P., 82a:35003b
- Potapenko, A. A. (with Šefel', M. B.) ★Методы математической физики. (Russian) [Methods of mathematical physics] 82f:35001
- Samarskii, A. A. See Budak, B. M.; et al., 82a:35002
- Šefel', M. B. See Potapenko, A. A., 82f:35001
- (Sinha, P. C.) See Mihailov, V. P., 82a:35003a
- Tihonov, A. N. See Budak, B. M.; et al., 82a:35002
- (Volosov, V. M.) See Bicadze, A. V., 82a:35001
- (Volosova, I. G.) See Bicadze, A. V., 82a:35001

secondary classifications:

- Collatz, Lothar. ★Differentialgleichungen. (German) [Differential equations] (82m:34001)
- Lamb, George L., Jr. ★Elements of soliton theory. (82f:35165)
- Parton, V. Z. (with Perlin, P. I.) ★Методы математической теории упругости. (Russian) [Methods of the mathematical theory of elasticity] (82i:73002)
- Perlin, P. I. See Parton, V. Z., (82i:73002)

35-02 Advanced exposition (research surveys, monographs, etc.)

- Bensoussan, Alain (with Lions, Jacques-Louis; Papanicolaou, George C.) ★Asymptotic analysis for periodic structures. 82h:35001
- Bers, Lipman (with John, Fritz; Schechter, Martin) ★Partial differential equations. 82c:35001
- Bhatnagar, P. L. ★Nonlinear waves in one-dimensional dispersive systems. 82c:35002
- (Bulough, Robin K.) See Solitons, 82m:35001
- (Caudrey, Philip J.) See Solitons, 82m:35001
- Chazarain, Jacques (with Piriou, Alain) ★Introduction à la théorie des équations aux dérivées partielles linéaires. (French) [Introduction to the theory of linear partial differential equations] 82i:35001
- Colton, David L. ★Analytic theory of partial differential equations. 82j:35001
- (Gårding, Lars) See Bers, Lipman; et al., 82c:35001
- (Householder, A. S.) See Bers, Lipman; et al., 82c:35001
- John, Fritz. ★Plane waves and spherical means applied to partial differential equations. 82c:35001
- See also Bers, Lipman; et al., 82c:35001
- (Lighthill, Michael James) See Bhatnagar, P. L., 82c:35002
- Lions, Jacques-Louis. See Bensoussan, Alain; et al., 82h:35001
- (Milgram, A. N.) See Bers, Lipman; et al., 82c:35001
- Papanicolaou, George C. See Bensoussan, Alain; et al., 82h:35001
- Piriou, Alain. See Chazarain, Jacques, 82i:35001
- Samarskii, A. A. Some problems of the theory of differential equations. (Russian) 82d:35003
- Schechter, Martin. See Bers, Lipman; et al., 82c:35001
- Skorobogat'ko, V. Ja. ★Исследования по качественной теории дифференциальных уравнений с частными производными. (Russian) [Investigation in the qualitative theory of partial differential equations] 82d:35004
- Solitons. ★Solitons. 82m:35001

secondary classifications:

- Björk, J.-E. ★Rings of differential operators. (82g:32013)
- Lamb, George L., Jr. ★Elements of soliton theory. (82f:35165)
- Taylor, Michael E. ★Pseudodifferential operators. (82i:35172)

35-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (d'Alembert, J.) See Euler, Leonhard, (82h:01075)
- (Blanc, Charles) See Euler, Leonhard, (82h:01075)
- (Clairaut, Alexis-Claude) See Euler, Leonhard, (82h:01075)
- Demidov, S. S. The development of research on first-order partial differential equations in the XVIII-XIX centuries. (Russian) (82h:01028)
- (Diaz, Joaquin Basilio) See Weinstein, Alexander, (82c:01073)
- Euler, Leonhard. ★Commercium epistolicum. [Correspondence] (82h:01075)
- Friedrichs, Kurt Otto. von Neumann's Hilbert space theory and partial differential equations. (82c:01034)
- (Grigor'jan, A. T.) See Euler, Leonhard, (82h:01075)
- (Habicht, Walter) See Euler, Leonhard, (82h:01075)
- (Juškevič, A. P.) See Euler, Leonhard, (82h:01075)
- (Lagrange, Joseph Louis) See Euler, Leonhard, (82h:01075)
- Oleinik, O. A. (with Sobolev, S. L.; Tihonov, A. N.) The works of I. G. Petrovskii on partial differential equations and their role in the development of the theory of differential equations. (Russian) (82j:01069)
- (Petrovskii, I. G.) See Oleinik, O. A.; et al., (82j:01069)
- (Picolet, Guy) See Euler, Leonhard, (82h:01075)

Simonov, M. I. The development of the idea of well-posedness of boundary value problems of mathematical physics. (Russian) (82h:01039)

Sobolev, S. L. See Oleinik, O. A.; et al., (82j:01069)

(Taton, René) See Euler, Leonhard, (82h:01075)

Tikhonov, A. N. See Oleinik, O. A.; et al., (82j:01069)

Weinstein, Alexander ★Spectra. (82i:01073)

Bibliography:

Weinstein, Alexander See Weinstein, Alexander, (82i:01073)

Biography:

Weinstein, Alexander See Weinstein, Alexander, (82i:01073)

35-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

Edelen, Dominic G. B. Programs for computer implementation of the exterior calculus with applications to isovector calculations. (82f:59003)

Reiman, Allan Computer-aided closure of the Lie algebra associated with a nonlinear partial differential equation. (82j:59006)

Zabusky, Norman J. Computational synergetics and mathematical innovation. (82m:00029)

35-06 Proceedings, conferences, etc.

(Berestycki, Henri) See Recent contributions to nonlinear partial differential equations, 82d:35001

(Brézis, Haim) See Nonlinear partial differential equations and their applications. Collège de France Seminar, 82i:35002 and Recent contributions to nonlinear partial differential equations, 82d:35001

(Emel'janov, K. V.) See Differential equations with a small parameter, 82d:35008

(Garnir, H. G.) See Singularities in boundary value problems, 82i:35005

(Gor'kov, Ju. P.) See Differential equations with a small parameter, 82d:35008

(Ladyženskaja, Olga A.) See Boundary value problems of mathematical physics and related questions in the theory of functions, 82m:35002

(Lions, Jacques-Louis) See Nonlinear partial differential equations and their applications. Collège de France Seminar, 82i:35002

(Makarov, I. P.) See Partial differential equations, 82i:35004

(Salakhitdinov, M. S.) See Boundary value problems for equations of mathematical physics, 82d:35006

(Sibirskii, K. S.) See Boundary value problems for partial differential equations, 82d:35007

(Sobolev, S. L.) See Partial differential equations, 82i:35003

(Uspenskii, S. V.) See Partial differential equations, 82i:35003

Applications of partial differential equations and numerical analysis ★Applications of partial differential equations and numerical analysis. (Japanese) 82g:35003

Applied analysis for partial differential equations in applied sciences ★Applied analysis for partial differential equations in applied sciences. (Japanese) 82d:35005

Boundary value problems ★Singularities in boundary value problems. 82i:35005

Boundary value problems for equations of mathematical physics ★Красивые задачи для уравнений математической физики. (Russian) [Boundary value problems for equations of mathematical physics] 82d:35006

Boundary value problems of mathematical physics and related questions in the theory of functions ★Красивые задачи математической физики и смежные вопросы теории функций. 13. (Russian) [Boundary value problems of mathematical physics and related questions in the theory of functions. 13] 82m:35002

Boundary value problems for partial differential equations ★Красивые задачи для дифференциальных уравнений в частных производных. (Russian) [Boundary value problems for partial differential equations] 82d:35007

Differential equations with a small parameter ★Дифференциальные уравнения с малым параметром. (Russian) [Differential equations with a small parameter] 82d:35008

Hyperfunctions and linear differential equations ★Hyperfunctions and linear differential equations. VI. (Japanese) 82d:35009

Linear differential equations ★Hyperfunctions and linear differential equations. VI. (Japanese) 82d:35009

Linear and nonlinear partial differential equations ★Linear and nonlinear partial differential equations. (Japanese) 82d:35010

Maratea ★Singularities in boundary value problems. 82i:35005

Mathematical physics ★Красивые задачи для уравнений математической физики. (Russian) [Boundary value problems for equations of mathematical physics] 82d:35006

NATO Advanced Study Institute:

Singularities in Boundary Value Problems ★Singularities in boundary value problems. 82i:35005

Nonlinear functional analysis ★Nonlinear functional analysis. 82g:35004

Nonlinear partial differential equations and their applications. Collège de France Seminar ★Nonlinear partial differential equations and their applications. Collège de France Seminar. Vol. I. 82i:35002

Nonlinear waves: classical theory and quantum theory ★Nonlinear waves: classical theory and quantum theory. (Japanese) 82h:35002

Paris ★Nonlinear partial differential equations and their applications. Collège de France Seminar. Vol. I. 82i:35002

Partial differential equations ★Applied analysis for partial differential equations in applied sciences. (Japanese) 82d:35005

★Linear and nonlinear partial differential equations. (Japanese) 82d:35010

★Дифференциальные уравнения с частными производными. (Russian) [Partial differential equations] 82i:35003

★Дифференциальные уравнения (в частных производных). (Russian) [Partial differential equations] 82i:35004

★Красивые задачи для дифференциальных уравнений в частных производных. (Russian) [Boundary value problems for partial differential equations] 82d:35007

Proceedings of the S. L. Sobolev Seminar, No. 2 ★Дифференциальные уравнения с частными производными. (Russian) [Partial differential equations] 82i:35003

Recent contributions to nonlinear partial differential equations ★Recent contributions to nonlinear partial differential equations. 82d:35001

Seminar:

Applied Mathematics ★Nonlinear partial differential equations and their applications. Collège de France Seminar. Vol. I. 82i:35002

Singularities in boundary value problems ★Singularities in boundary value problems. 82i:35005

Symposium:

Applications of Partial Differential Equations and Numerical Analysis ★Applications of partial differential equations and numerical analysis. (Japanese) 82g:35003

Applied Analysis for Partial Differential Equations in Applied Sciences ★Applied analysis for partial differential equations in applied sciences. (Japanese) 82d:35005

Hyperfunctions and Linear Differential Equations ★Hyperfunctions and linear differential equations. VI. (Japanese) 82d:35009

Linear and Nonlinear Partial Differential Equations ★Linear and nonlinear partial differential equations. (Japanese) 82d:35010

Nonlinear Functional Analysis ★Nonlinear functional analysis. 82g:35004

Nonlinear Waves: Classical Theory and Quantum Theory ★Nonlinear waves: classical theory and quantum theory. (Japanese) 82h:35002

secondary classifications:

(Everitt, W. N.) See Ordinary and partial differential equations, (82c:34003) and (82c:34004)

(Hoppensteadt, Frank C.) See Mathematical aspects of physiology, (82f:92003)

(Manakov, S. V.) See Soliton theory, (82k:81002)

(Nachbin, Leopoldo) See Mathematical analysis and applications, (82i:00014)

(Ostianu, N. M.) See Problems in geometry, (82h:53002)

(Radjabov, N. R.) See Differential and integral equations, (82m:34002)

(Schwartz, Laurent) See Mathematical analysis and applications, (82i:00014)

(Sibirskii, K. S.) See All-Union Conference: Qualitative Theory of Differential Equations, (82d:34002)

(Sleman, B. D.) See Ordinary and partial differential equations, (82c:34004)

(Zaharov, V. E.) See Soliton theory, (82k:81002)

All-Union Conference:

Qualitative Theory of Differential Equations ★V Всесоюзная Конференция по Качественной Теории Дифференциальных Уравнений. (Russian) [Fifth All-Union Conference on Qualitative Theory of Differential Equations] (82d:34002)

Birthday:

Schwartz, Laurent ★Mathematical analysis and applications. Part A. (82i:00014a)

★Mathematical analysis and applications. Part B. (82i:00014b)

Boundary value problems of mathematical physics ★Boundary value problems of mathematical physics. X. (82i:00011)

Conference:

Nonlinear Problems in Geometry ★Nonlinear problems in geometry. (82j:58001)

Ordinary and Partial Differential Equations ★Ordinary and partial differential equations. (82c:34003)

★Ordinary and partial differential equations. (82c:34004)

Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)

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★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)

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Differential and integral equations ★Дифференциальные и интегральные уравнения. Вып. 3. (Russian) [Differential and integral equations. No. 3] (82m:34002)

Dundee ★Ordinary and partial differential equations. (82c:34003)

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Geometry ★Nonlinear problems in geometry. (82j:58001)

Itogi Nauki i Tehniki ★Проблемы геометрии. Том 12. (Russian) [Problems in geometry. Vol. 12] (82h:53002)

Katata ★Nonlinear problems in geometry. (82j:58001)

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Linear differential equations ★Microfunctions and linear differential equations. VII. (Japanese) (82d:46002)

Mathematical analysis and applications ★Mathematical analysis and applications. Part A. (82i:00014a)

★Mathematical analysis and applications. Part B. (82i:00014b)

Mathematical aspects of physiology ★Mathematical aspects of physiology. (82f:92003)

Microfunctions and linear differential equations ★Microfunctions and linear differential equations. VII. (Japanese) (82d:46002)

Nonlinear problems in geometry ★Nonlinear problems in geometry. (82j:58001)

Ordinary and partial differential equations ★Ordinary and partial differential equations. (82c:34003)

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Partial differential equations ★Ordinary and partial differential equations. (82c:34003)

Physiology ★Mathematical aspects of physiology. (82f:92003)

Problems:

Geometry ★Nonlinear problems in geometry. (82j:58001)

Problems in geometry ★Проблемы геометрии. Том 12. (Russian) [Problems in geometry. Vol. 12] (82h:53002)

Salt Lake City, Utah ★Mathematical aspects of physiology. (82f:92003)

Soliton theory ★Soliton theory. (82k:81002)

Summer Seminar:

Applied Mathematics ★Mathematical aspects of physiology. (82f:92003)

Symposium:

Deformation Theory of Linear Differential Equations and a New Viewpoint for

Extension of Abelian Function Theory ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) (82b:58001)

Division of Mathematics of the Taniguchi Foundation ★Nonlinear problems in geometry. (82j:58001)

Microfunctions and Linear Differential Equations ★Microfunctions and linear differential equations. VII. (Japanese) (82d:46002)

Soviet-American, Soliton Theory ★Soliton theory. (82k:81002)

35Axx General theory

35A05 General existence and uniqueness theorems

Hansen, Sönke Uniqueness of the Cauchy problem for convolution equations. 82b:35001
Isakov, V. M. On the uniqueness of the solution of the Cauchy problem. (Russian) 82d:35011

Mizohata, Sigeru Sur l'unicité dans le problème de Cauchy. 82j:35002

Roberts, Gary B. Uniqueness in the Cauchy problem for characteristic operators of Fuchsian type. 82i:35006

Šeda, Václav On a modification of the method of majorants. (Slovak and Russian summaries) 82b:35002

Yoshino, Masahumi Remarks on the Goursat problems. 82a:35004

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Kostenko, V. G. Uniqueness of the solution of a problem of interaction of a piecewise-smooth elastic shell with acoustic media. (Ukrainian. Russian summary) (82a:73008)

Kučment, P. A. The absence of L_2 -solutions to periodic partial differential equations. (Russian) (82c:35014)

Ohya, Yūjiro Le problème de Cauchy à caractéristiques multiples. (82a:35026)

Shih, Weishu Une remarque sur le degré d'une application continue et les équations aux dérivées partielles avec condition intégrale. (English summary) (82j:58029)

Soga, Hideo Parabolic mixed problems with an oblique derivative. (82b:35076)

Tutschke, Wolfgang Reduction of the problem of linear conjugation for first-order nonlinear elliptic systems in the plane to an analogous problem for holomorphic functions. (82b:35009)

35A07 Local existence and uniqueness theorems [See also 35H05, 35Sxx.]

Chen, Qing Yi On fundamental solutions of operators of principal and nonprincipal types. 82k:35002

Chi, Dong Pyo See Kim, Jongsik; et al., 82i:35007

Cho, Tae Geun See Kim, Jongsik; et al., 82i:35007

Kim, Jongsik (with Cho, Tae Geun; Chi, Dong Pyo) Necessity of the Nirenberg-Trèves condition. 82i:35007

(with Kim, Jung Soo; Shin, Joon Kook) Unsolvability of the Mizohata operator. 82k:35003

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Schuchman, Vladimir Uniqueness of the solution of the Cauchy problem for linear partial differential equations with characteristics of variable multiplicity. 82m:35003

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Tsuno, Yoshimichi Localization of differential operators and the uniqueness of the Cauchy problem. 82b:35003

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secondary classifications:

Lévy-Bruhl, Pierre Résolubilité locale et globale d'opérateurs invariants du second ordre sur des groupes de Lie nilpotents. (English summary) (82d:58067)

Matsumoto, Waichirō Sur la condition de Levi: problème de Cauchy pour les systèmes à caractéristiques doubles. (82b:35102)

Popivanov, Pet'ar R. (with Popov, Georgi St.) Microlocal properties of a class of pseudodifferential operators with multiple characteristics. (Russian) (82d:35038)

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Zuily, Claude Unicité du problème de Cauchy pour une classe d'opérateurs différentiels. (82b:35018)

35A08 Fundamental solutions

Wojcik, A. On the least principal fundamental solution of a parabolic differential equation. 82g:35005

secondary classifications:

Alinhac, S. (with Baouendi, M. S.) Construction de solutions nulles et singulières pour des opérateurs de type principal. (82b:35030)

Baouendi, M. S. See Alinhac, S., (82b:35030)

35A10 Cauchy-Kowalewski theorems

Miyake, Masatake On the Cauchy-Kowalewski theorem for general systems of equations. (Japanese) 82b:35004

On Cauchy-Kowalewski's theorem for general systems. 82b:35005

Reduction to the first order systems of the Kowalevskian systems in the sense of Volevič. 82b:35006

Global and local Goursat problems in a class of holomorphic or partially holomorphic functions. 82b:35003

Oganesjan, G. R. An initial value problem with given Wronskians. (Russian. Armenian and English summaries) 82k:35004

Orsjannikov, L. V. Abstract form of the Cauchy-Kowalewski theorem and its application. (Russian) 82b:35007

Pate, Thomas H. A direct iterative method for an abstract Cauchy-Kowalewski theorem. 82k:35005

secondary classifications:

Steinberg, Stanley Local propagator theory. (82i:34075)

35A15 Variational methods

secondary classifications:

Heffrich, Hans-Peter Simultaneous approximation in negative norms of arbitrary order. (French summary) (82k:65054)

Lehmann, Reinhard ★Variationsformulierung elliptischer Randwertaufgaben. (German) [Variational formulation of elliptic boundary value problems] (82g:35034)

35A20 Analytic methods, singularities

Bauer, Karl Wilhelm (with Ruscheweyh, Stephan) ★Differential operators for partial differential equations and function theoretic applications. 82d:35012

Dal Fabbro, Florangela (with Furioli Martinolli, Antonella) Analysis of the solutions of a partial differential equation of hypergeometric type with respect to one variable. I. (Italian) 82c:35003

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Ōuchi, Sumio An integral representation of singular solutions of linear partial differential equations in the complex domain. 82c:35002

Ruscheweyh, Stephan See Bauer, Karl Wilhelm, 82d:35012

Schiltz, Dominique (with Vaillant, Jean; Wagschal, Claude) Problème de Cauchy ramifié à caractéristiques multiples en involution. 82j:35004

Sjöstrand, Johannes Reflection of analytic singularities. (See 81e:81003)

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Wagschal, Claude See Schiltz, Dominique; et al., 82j:35004

secondary classifications:

van den Essen, Arno Regular singularities along normal crossings. (82a:14004)

Froin, V. H. Linear systems of first-order partial differential equations with semiregular degeneration on a hyperplane. (Russian) (82f:35051)

Grigis, Alain (with Schapira, Pierre; Sjöstrand, Johannes) Propagation de singularités analytiques pour des opérateurs à caractéristiques multiples. (English summary) [Propagation of analytic singularities for operators with multiple characteristics] (82m:58053)

Heffler, Bernard Propagation des singularités pour des problèmes aux limites [d'après R. B. Melrose et J. Sjöstrand]. (82d:35030)

Lounsbury, P. Singularités dans les problèmes aux limites pour le système de Maxwell. (English summary) [Singularities in boundary value problems for the Maxwell system] (82m:35131)

(Melrose, R. B.) See Heffler, Bernard, (82d:35030)

Miyake, Masatake On Cauchy-Kowalevski's theorem for general systems. (82b:35005)

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Schapira, Pierre See Grigis, Alain; et al., (82m:58053)

Sjöstrand, Johannes See Grigis, Alain; et al., (82m:58053) and Heffler, Bernard, (82d:35030)

Tomantschger, Kurt Walter Allgemeine Darstellungssätze für die Lösungen einer elliptischen Differentialgleichung. (English summary) (82d:35042)

Tutschke, Wolfgang Boundary value problems for generalized analytic functions of several complex variables. (82f:30053)

Véron, Laurent Singular solutions of some nonlinear elliptic equations. (82f:35076)

35A22 Transform methods

Calogero, Francesco Spectral transform and solitons: an introduction to a novel technique to solve (certain classes of) nonlinear evolution equations. (See 82g:82002)

Steudel, H. A relation connecting scale transformation, Galilean transformation and Bäcklund transformation for the nonlinear Schrödinger equation. 82b:35008

Tutschke, Wolfgang Reduction of the problem of linear conjugation for first-order nonlinear elliptic systems in the plane to an analogous problem for holomorphic functions. 82b:35009

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Doetsch, Gustav ★Anleitung zum praktischen Gebrauch der Laplace-Transformation und der Z-Transformation. (German) [Guide to the practical use of the Laplace transformation and the Z-transformation] (82k:44001)

(Herschel, Rudolf) See Doetsch, Gustav, (82k:44001)

Landau, Eberhard General Vekua operators. (82b:35021)

35A25 Other special methods

- Cao Xuan Chuan A theorem on the separation of a system of coupled differential equations. (Russian) **82d:35013**
- Černík, Ju. I. The method of stepwise separation of variables. (Russian) **82d:35014**
- Dubinskii, Ju. A. On a method for solving partial differential equations. (Russian) **82j:35005**
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- Klink, Helge-Karsten (with Pieper, K.-D.) Über Lösungen von komplexen partiellen Differentialgleichungssystemen. **82d:35006**
- Obita, A. F. Periodic solutions of systems in total differentials. (Ukrainian. Russian summary) **82f:35002**
- Pieper, K.-D. See Klink, Helge-Karsten, **82d:35006**
- Sapozhalov, V. N. Separation of variables in a second-order linear differential equation. (Russian) **82d:35015**
- Smirnov, M. M. See Erugin, N. P., **82j:35006**
- Wardle, Leigh J. The direct boundary integral method for potential theory and elasticity. **82d:35016**

secondary classifications:

- Hainzel, Josef Neue Aspekte der Separationsmethode. (**82j:53032**)
- Konopel'chenko, B. G. Integrable equations and differential geometry. (**82d:58027**)
- Michalska-Trantman, R. Exact solution of the initial eigenvalue problem for coherent pulse propagation. (**82b:81157**)
- Newton, Roger G. Erratum: "Inverse scattering. II. Three dimensions" [J. Math. Phys. 21 (1980), no. 7, 1698-1715; MR 81m:81066b]. (**82c:81044**)
- Noguchi, Akira See Ueda, Yutaka, (**82c:35075**)
- Peral Alonso, Juan C. L^p estimates for the wave equation. (See **80f:42001b**)
- Safarov, M. N. Solution of a nonlinear problem by the method of degenerate hypergeometric transformations. (Russian) (**82g:35124**)
- Ueda, Yutaka (with Noguchi, Akira) On the relationship between the Zakharov-Shabat and Hirota-Oishi schemes for constructing various soliton solutions. (**82c:35075**)

35A30 Geometric theory, characteristics, transformations

- Abellanas, L. (with Galindo, A.) Quasi-Lagrangian systems. **82b:35004**
- Čupahin, A. P. The Lie-Bäcklund group for an equation of developable surfaces. (Russian) **82f:35003**
- Galindo, A. See Abellanas, L., **82b:35004**
- Hermann, Robert What do we know about the geometric nature of equations which can be solved using the inverse scattering technique? (See **82b:81117**)
- Konopel'chenko, B. G. On the structure of the commutative Z_2 graded algebra valued integrable equations. **82c:35005**
- Mimura, Fumitake (with Nono, Takayuki) Generalized contact transformations. **82i:35010**
- Nono, Takayuki See Mimura, Fumitake, **82i:35010**
- Omote, Minoru (with Wadati, Miki) Bäcklund transformations for the Ernst equation. **82f:35004**
- Pommaret, Jean-François Differential Galois theory. **82c:35004**
- Sachdev, P. L. A generalised Cole-Hopf transformation for nonlinear parabolic and hyperbolic equations. (French summary) **82a:35006**
- Singh, M. C. Group theoretic analysis of similarity transformations with applications to the nonhomogeneous and nonlinear problems of wave propagation. (See **82b:81004**)
- Stranup, W. Invariant group solutions of hydrodynamical equations. **82i:35011**
- Tu, Gui Zhang On the similarity solution of evolution equation $u_t = H(x, t, u, u_x, u_{xx}, \dots)$. **82d:35017**
- Wadati, Miki See Omote, Minoru, **82f:35004**

secondary classifications:

- Bacry, H. (with Cadilhac, M.) Metaplectic group and Fourier optics. (**82d:78002**)
- Boyd, J. N. (with Raychowdhury, P. N.) Group theoretical aspects of solutions of a two-dimensional steady-state heat equation. (**82m:35064**)
- Burgan, J. R. See Munier, A.; et al., (**82g:35054**)
- Cadilhac, M. See Bacry, H., (**82d:78002**)
- Case, K. M. A conjecture about Bäcklund transformations. (**82c:35068**)
- Christiansen, P. L. Application of new Bäcklund transformations for the 2+1- and 3+1-dimensional sine-Gordon equations. (**82b:35092**)
- Chudnovsky, David V. (with Chudnovsky, Gregory V.) Completely X -symmetric S -matrices corresponding to theta functions and models of statistical mechanics. (**82f:81069**)
- Chudnovsky, Gregory V. See Chudnovsky, David V., (**82f:81069**)
- Crampin, Michael Solitons and $SL(2, \mathbb{R})$. (**82c:58005**)
- Crighton, D. G. See Nimmo, J. J. C., (**82f:35173**)
- Degasperis, A. (with Ol'shanevskii, M. A.; Perelomov, A. M.) Group-theoretical approach to a class of Lax equations including those solvable by the spectral transform. (**82c:58027**)
- Drjuma, V. S. On the problem of reduction for nonlinear equations integrable by the method of the inverse problem of scattering theory. (Russian) (**82j:12029**)
- Feix, M. R. See Munier, A.; et al., (**82g:35054**)
- Fijalkow, E. See Munier, A.; et al., (**82g:35054**)
- Fuchsteiner, Benno The Lie algebra structure of nonlinear evolution equations admitting infinite-dimensional abelian symmetry groups. (**82f:58089**)
- Fujimoto, Atsuo (with Watanabe, Yoshihide) Symmetries of certain nonlinear evolution equations. (**82g:58040**)
- Fušek, V. I. A new method of investigating the group properties of systems of partial differential equations. (Russian. English summary) (**82f:58086**)

- Galaktionov, V. A. Approximate self-similar solutions of equations of heat conduction type. (Russian) (**82f:35022**)
- Gliniskii, G. F. Nonlinear electrodynamics and anisotropic space-time. (Russian) (**82b:78004**)
- Grudo, E. I. (with Jančuk, L. F.) On the general theory of Pfaffian systems. (Russian) (**82i:58006**)
- Gutierrez, J. See Munier, A.; et al., (**82g:35054**)
- Hojman, Sergio Construction of genotopic transformations for first order systems of differential equations. (**82m:70023**)
- Ibragimov, N. H. (with Šabat, A. B.) Infinite Lie-Bäcklund algebras. (Russian) (**82b:58007**)
- (with Šabat, A. B.) Evolution equations with a nontrivial Lie-Bäcklund group. (Russian) (**82f:58087**)
- See also Žiber, A. V.; et al., (**82b:58058**)
- Jančuk, L. F. See Grudo, E. I., (**82i:58006**)
- Kaliappan, P. See Lakshmanan, M., (**82f:35164**)
- Kalnins, E. G. (with Miller, Willard, Jr.) Separable coordinates for three-dimensional complex Riemannian spaces. (**82c:53038**)
- Kalos, M. H. See Zabolitzky, J. G., (**82b:81137**)
- Kaup, D. J. The Estabrook-Wahlquist method with examples of application. (**82c:58061**)
- Kocić, Vlatko Lj. Theorems on nonlinear superpositions. II. The general second-order equation. (**82f:35036**)
- Konopel'chenko, B. G. The group structure of Bäcklund transformations. (**82b:58005**)
- Kosmann-Schwarzbach, Yvette Generalized symmetries of nonlinear partial differential equations. (**82g:58101**)
- Generalized symmetries of partial differential equations. (See **82b:81004**)
- Kyriakopoulos, E. Bäcklund transformations and exact solutions of the stationary axially symmetric Einstein equations. (**82c:83022**)
- Lakshmanan, M. (with Kaliappan, P.) On the invariant solutions of the Korteweg-de Vries-Burgers equation. (**82f:35164**)
- Leznov, A. N. On complete integrability of a nonlinear system of partial differential equations in two-dimensional space. (Russian. English summary) (**82c:58047**)
- Lloyd, Stuart P. The infinitesimal group of the Navier-Stokes equations. (**82g:35091**)
- Lyčagin, V. V. On singularities of the solutions of differential equations. (Russian) (**82a:58056**)
- Miller, Willard, Jr. See Kalnins, E. G., (**82c:53038**)
- Miyake, Masatake Reduction to the first order systems of the Kowalevskian systems in the sense of Volevič. (**82b:35006**)
- Munier, A. (with Burgan, J. R.; Gutierrez, J.; Fijalkow, E.; Feix, M. R.) Group transformations and the nonlinear heat diffusion equation. (**82g:35054**)
- Nimmo, J. J. C. (with Crighton, D. G.) Bäcklund transformations for the cylindrical Korteweg-de Vries equation. (**82f:35173**)
- Ōsaka, Toshinori A canonical form of a system of microdifferential equations with noninvolutory characteristics and branching of singularities. (**82c:58068**)
- Ogiełski, A. T. (with Prasad, M. K.; Sinha, A.; Wang, Ling Lie Chau) Bäcklund transformations and local conservation laws for principal chiral fields. (**82f:81050**)
- Ol'shanevskii, M. A. See Degasperis, A.; et al., (**82c:58027**)
- Olver, Peter J. Symmetry groups and group invariant solutions of partial differential equations. (**82b:58104**)
- Perelomov, A. M. See Degasperis, A.; et al., (**82c:58027**)
- Pirani, Felix A. E. (with Robinson, David Clyde; Shadwick, William F.) ★Local jet bundle formulation of Bäcklund transformations. (**82g:58097**)
- Pommaret, Jean-François Galois theory for systems of partial differential equations. (See **82b:81004**)
- Prasad, M. K. See Ogiełski, A. T.; et al., (**82f:81050**)
- Prikarpatskii, A. K. The geometric structure and Bäcklund transforms of nonlinear evolutionary equations that have a Lax representation. (Russian. English summary) (**82c:58007**)
- Raychowdhury, P. N. See Boyd, J. N., (**82m:35064**)
- Reiman, Allan Computer-aided closure of the Lie algebra associated with a nonlinear partial differential equation. (**82j:58006**)
- Robinson, David Clyde See Pirani, Felix A. E.; et al., (**82g:58097**)
- Šabat, A. B. See Ibragimov, N. H., (**82b:58007**); (**82f:58087**) and Žiber, A. V.; et al., (**82b:58058**)
- Sattinger, D. H. ★Les symétries des équations et leurs applications dans la mécanique et la physique. (French) [The symmetries of equations and their applications in mechanics and physics] (**82i:58001**)
- Schapiro, Pierre Propagation at the boundary of analytic singularities. (**82m:58054**)
- Conditions de positivité dans une variété symplectique complexe. Application à l'étude des microfonctions. (**82i:58067**)
- Sensaou, S. I. Invariant solutions of a three-dimensional problem of ideal plasticity. (Russian) (**82c:73040**)
- Shadwick, William F. The KdV prolongation algebra. (**82f:58007**)
- See also Pirani, Felix A. E.; et al., (**82g:58097**)
- Sinha, A. See Ogiełski, A. T.; et al., (**82f:81050**)
- Štelen, V. M. Group analysis of nonlinear systems of differential equations connected with the Schrödinger equation. (Russian. English summary) (**82d:81024**)
- Steudel, H. A relation connecting scale transformation, Galilean transformation and Bäcklund transformation for the nonlinear Schrödinger equation. (**82b:35008**)
- Talyser, A. A. The method of differential constraints and invariant solutions of strictly hyperbolic systems with two independent variables. (Russian) (**82m:58059**)
- Wang, Ling Lie Chau See Ogiełski, A. T.; et al., (**82f:81050**)
- Watanabe, Yoshihide See Fujimoto, Atsuo, (**82g:58040**)
- Zabolitzky, J. G. (with Kalos, M. H.) Solution of the four-nucleon Schrödinger equation. (**82b:81137**)
- Žiber, A. V. (with Ibragimov, N. H.; Šabat, A. B.) Liouville-type equations. (Russian) (**82b:58058**)
- Complete description of the Lie-Bäcklund algebra for equations of generation of the second harmonic. (Russian) (**82m:58060**)
- Zvjagin, M. Ju. Classification of Bäcklund transforms of second-order partial differential equations. (Russian) (**82j:58003**)

35A35 Theoretical approximation to solutions

- Acker, Andrew How to approximate the solutions of certain free boundary problems for the Laplace equation by using the contraction principle. (German summary) **82m:35064**
- Freeden, Willi (with Kersten, Heinrich) A constructive approximation theorem for the oblique derivative problem in potential theory. **82j:35007**
- Kersten, Heinrich See Freeden, Willi, **82j:35007**
- Kisielewicz, Michał On the nonconvergence of successive approximations in the theory of the equation $z''_{xy} = f(x, y, z, z'_x, z'_y)$. **82j:35008**
- Pravednaja, T. N. Approximate analytic solution of some boundary value problems for the wave equation. (Russian. English summary) **82f:35005**
- secondary classifications:
- Bensoussan, Alain (with Lions, Jacques-Louis) Homogénéisation et perturbations singulières. **(82b:35014)**
- Dadajan, Ju. G. (with Oganesjan, L. A.) Coordinatewise condensation of a net in the solution of a diffraction problem in domains with corners. (Russian. Armenian summary) **(82k:35026)**
- Janenko, N. N. Some equations of variable type. (Russian) **(82f:35135)**
- Lions, Jacques-Louis See Bensoussan, Alain, **(82b:35014)**
- Oganesjan, L. A. See Dadajan, Ju. G., **(82k:35026)**

35A40 Numerical approximation to solutions {For numerical analysis, see 65Mxx, 65Nxx, 65P05.}

- secondary classifications:
- Duderstadt, James J. See Mehlhorn, Thomas A., **(82b:82098)**
- Mehlhorn, Thomas A. (with Duderstadt, James J.) A discrete ordinates solution of the Fokker-Planck equation characterizing charged particle transport. **(82b:82098)**
- Silvester, P. P. The fundamental equations of electric and magnetic fields. **(82b:78009)**

35A99 None of the above, but in this section

- Adimurthi, A. (with Nori, Madhav V.) Sur l'espace des solutions des systèmes sous-déterminés. (English summary) **82f:35006**
- Nori, Madhav V. See Adimurthi, A., **82f:35006**
- Sjöstrand, Johannes Analytic singularities of solutions of boundary value problem. (See **82i:00012**)

secondary classifications:

- Andronikof, Emmanuel Systèmes déterminés et systèmes normaux d'équations aux dérivées partielles. (English summary) [Determined systems and normal systems of partial differential equations] **(82b:58066)**
- Arhutik, G. M. (with Grudo, É. I.) A general theory of higher-order total linear differential equations. (Russian. English summary) **(82i:58005)**
- Chudnovsky, David V. Riemann monodromy problem, isomonodromy deformation equations and completely integrable systems. **(82g:58036)**
- Galiullin, A. S. Construction of a force field along a given family of trajectories. (Russian) **(82i:70016)**
- Grudo, É. I. See Arhutik, G. M., **(82i:58005)**
- Persson, Jan Partial hyperbolicity and partial Gevrey classes. **(82m:35020)**
- Pommaret, Jean-François Systèmes automorphes d'équations aux dérivées partielles. (English summary) **(82e:58106)**
- Théorie de Galois différentielle. (English summary) **(82f:12031)**

35Bxx Qualitative properties of solutions

secondary classifications:

- Lakshmikantham, V. Some problems of reaction-diffusion equations. **(82g:35053)**
- Skorobogat'ko, V. Ja. ★ Исследования по качественной теории дифференциальных уравнений с частными производными. (Russian) [Investigation in the qualitative theory of partial differential equations] **(82d:35004)**
- 35B05 Comparison theorems; oscillation, zeros and growth of solutions
- Agarwal, Ravi P. (with Thandapani, E.) A comparison result for the Goursat problem. **82b:35010**
- Ahmad, Shair (with Lazer, Alan C.) On the role of Hopf's maximum principle in elliptic Sturmian theory. **82e:35005**
- Allegretto, W. Finiteness criteria for the negative spectrum and nonoscillation theory for a class of higher order elliptic operators. (See **82k:34002**)
- Chan, C. Y. (with Young, Eutiquio C.) Comparison theorems for a coupled system of singular hyperbolic differential inequalities. I. Time-independent uncoupling coefficients. (Italian summary) **82j:35009a**
- (with Young, Eutiquio C.) Comparison theorems for a coupled system of singular hyperbolic differential inequalities. II. Time-dependent coefficients with mixed coupled boundary conditions. (Italian summary) **82j:35009b**
- Dobrovrot, I. G. See Gorbaiuk, V. I., **82g:35006**
- Gardner, Robert A. Comparison and stability theorems for reaction-diffusion systems. **82i:35012**
- Gorbaiuk, V. I. (with Dobrovrot, I. G.) Conditions for oscillation of solutions of a class of higher-order elliptic equations with constant coefficients. (Russian) **82g:35006**
- Kitamura, Yuichi (with Kusano, Takasi) An oscillation theorem for a sublinear Schrödinger equation. **82a:35007**
- (with Kusano, Takasi) Oscillation criteria for semilinear metaharmonic equations in exterior domains. **82b:35011**

- Kusano, Takasi (with Yoshida, Norio) Nonlinear oscillation criteria for singular elliptic differential operators. **82e:35006**
- (with Yoshida, Norio) Oscillation criteria for a class of nonlinear partial differential equations. **82i:35013**
- See also Kitamura, Yuichi, **82a:35007** and **82b:35011**
- Lazer, Alan C. See Ahmad, Shair, **82e:35005**
- Müller-Pfeiffer, Erich Oscillation criteria of Nehari type for the Schrödinger equation. **82f:35007**
- Ein Oszillationssatz für elliptische Differentialgleichungen höherer Ordnung. **82f:35008**
- Shapiro, Victor L. N -functions and the weak comparison principle. **82a:35008**
- Sperb, René P. Comparison results in a class of reaction-diffusion problems. (German summary) **82f:35009**
- Thandapani, E. See Agarwal, Ravi P., **82b:35010**
- Travis, Curtis C. (with Yoshida, Norio) Oscillation criteria for third order hyperbolic characteristic initial value problems. **82b:35014**
- Wright, Lynne C. A comparison theorem for higher order elliptic differential equations. **82k:35007**
- Yoshida, Norio See Kusano, Takasi, **82e:35006**; **82i:35013** and Travis, Curtis C., **82i:35014**
- Young, Eutiquio C. See Chan, C. Y., **82j:35009**

secondary classifications:

- Baider, A. (with Feldman, Edgar A.) On oscillatory elliptic equations on manifolds. **(82b:58092)**
- Chen, Lu San (with Yeh, Cheh Chih) On the Fourier's first problem for a system of nonlinear parabolic equations with unbounded coefficients. **(82b:35067)**
- Feldman, Edgar A. See Baider, A., **(82b:58092)**
- Fife, Paul C. (with Tang, Min Ming) Comparison principles for reaction-diffusion systems: irregular comparison functions and applications to questions of stability and speed of propagation of disturbances. **(82e:35045)**
- Filippov, I. G. (with Nurmuhamedov, H. D.) On the theory of oscillations of an elastic plate lying on a rigid base. (Russian) **(82b:73020)**
- Galaktionov, V. A. Two methods for comparing solutions of parabolic equations. (Russian) **(82b:35082)**
- Nurmuhamedov, H. D. See Filippov, I. G., **(82b:73020)**
- Tang, Min Ming See Fife, Paul C., **(82e:35045)**
- Wildenauer, Peter Existence of a minimal solution and a maximal solution of nonlinear elliptic boundary value problems. **(82b:35040)**
- Yeh, Cheh Chih See Chen, Lu San, **(82b:35067)**

35B10 Periodic solutions

- Asrorov, A. (with Hudaverdiev, K. I.) Investigation of the periodic solution almost everywhere of a one-dimensional boundary value problem for nonlinear hyperbolic second-order equations. (Russian) **82f:35010**
- Bahri, Abbas (with Brézis, Haim) Periodic solution of a nonlinear wave equation. **82f:35011**
- Brézis, Haim (with Coron, Jean-Michel) Periodic solutions of nonlinear wave equations and Hamiltonian systems. **82g:35007**
- See also Bahri, Abbas, **82f:35011**
- Coron, Jean-Michel See Brézis, Haim, **82g:35007**
- Dvorjaninov, S. V. Periodic solution of an autonomous singularly perturbed parabolic system. (Russian) **82d:35018**
- Hudaverdiev, K. I. See Asrorov, A., **82f:35010**
- Jank, Gerhard ★ Periodische Lösungen der elliptischen sinh-Gordon Gleichung. (German) [Periodic solutions of the elliptic sinh-Gordon equation] **82m:35005**
- Nakao, Mitsuhiro Existence of classical periodic solutions of some nonlinear wave equations in one space dimension. **82b:35005**
- Sanchez, Luis Periodic solutions of a nonlinear evolution equation with a linear dissipative term. **82f:35012**
- Selubin, V. V. Existence of periodic solutions of the generalized Burgers system. **82i:35015**
- Willem, Michel Periodic solutions of wave equations with jumping nonlinearities. **82f:35013**

secondary classifications:

- Cabannes, Henri Mouvements périodiques d'une corde vibrante en présence d'un obstacle ponctuel. (English summary) **(82i:73028)**
- Cesari, Lamberto (with Kannan, Rangachary) Existence of solutions of nonlinear hyperbolic equations. **(82d:35065a)**
- Dong, Guang Chang (with Li, Shu Jie) A boundary value problem for nonlinear telegraph equation. **(82j:35098)**
- Dvorjaninov, S. V. See Vasil'eva, A. B., **(82b:35085)**
- Herrmann, Leopold Periodic solutions of abstract differential equations: the Fourier method. **(82a:34073)**
- Howell, Kenneth B. Periodic and "slightly" periodic boundary value problems in elastostatics on bodies bounded in all but one direction. **(82i:73009)**
- Kannan, Rangachary See Cesari, Lamberto, **(82d:35065a)**
- Lamerova, Dana A note to the theory of periodic solutions of a parabolic equation. (Czech summary) **(82b:35074)**
- Li, Shu Jie See Dong, Guang Chang, **(82j:35098)**
- Obita, A. F. Periodic solutions of systems in total differentials. (Ukrainian. Russian summary) **(82f:35002)**
- Rabinowitz, Paul H. Critical points of indefinite functionals and periodic solutions of differential equations. **(82e:58043)**
- Ts'ai, Lung I Periodic solutions of nonlinear elliptic equations. **(82m:35052)**
- Vasil'eva, A. B. (with Dvorjaninov, S. V.) Periodic solutions of singularly perturbed equations of parabolic type. (Russian) **(82b:35085)**

35B15 Almost periodic solutions

- Isomelli, Annamaria** Bounded or quasiperiodic solutions of total differential equations that are discontinuous in the unknown. I. (Italian. English summary) **82b:35012**
- Ishii, Hitoshi** Erratum: "Asymptotic stability of almost periodic solutions of a free boundary problem arising in hydraulics" [Bull. Fac. Sci. Engrg. Chuo Univ. 22 (1979), 73-95; MR 81k:35016]. **82g:35008**
- Pikulin, V. P.** Periodic and almost periodic solutions of weakly nonlinear and parabolic equations. (Russian) **82g:35009**
- Sartanov, Z. A.** A pseudoperiodic solution of a system of partial differential equations. (Russian) (See **82b:35003**)
- Šebelin, V. V.** Bounded, almost-periodic solutions of a viscous gas equation. (Russian) **82a:35006**
- Zaidman, S.** A partial differential equation with almost-periodic right-hand side. **82d:35019**

secondary classifications:

- Dobrohotov, S. Ju.** (with Maslov, V. P.) Finite-zone almost periodic solutions in WKB-approximations. (Russian) (**82i:58035**)
- Greenlee, W. M.** Singular perturbation of eigenvalues of semibounded operators. (**82d:47022**)
- Hafiz, B.** Nonlinear evolution equations, recurrence and stochasticity. (**82m:35128**)
- Lisevič, L. M.** (with Švirčevs'ka, Z. S.) Existence of an almost periodic solution of a boundary value problem for the wave equation. (Ukrainian. Russian summary) (**82f:35109**)
- Maslov, V. P.** See **Dobrohotov, S. Ju.** (**82i:58035**)
- Švirčevs'ka, Z. S.** See **Lisevič, L. M.** (**82f:35109**)
- Umbetžanov, D. U.** Investigation of almost-multiperiodic solutions of hyperbolic systems by means of reduction to canonical form. (Russian. Kazakh summary) (**82i:35110**)
- Yamaguchi, Masaru** Existence and stability of bounded and almost periodic solutions of perturbed quasilinear partial differential equations of standard types. (**82m:35009**)

35B20 Perturbations

- Karpman, V. I.** (with Solov'ev, V. V.) The influence of perturbations on the shape of a sine-Gordon soliton. **82c:35006**
- Paulin, Jeannine Saint Jean** Homogénéisation et perturbations. (English summary) **82c:35004**
- Sánchez-Palencia, Enrique** ★Nonhomogeneous media and vibration theory. **82j:35010**
- Solov'ev, V. V.** See **Karpman, V. I.** (**82c:35006**)

secondary classifications:

- Ablovitz, Mark J.** See **Kodama, Yuji** (**82f:35163**)
- Kodama, Yuji** (with Ablovitz, Mark J.) Perturbations of solitons and solitary waves. (**82f:35163**)
- Melnik, V. S.** Boundary control of objects described by a nonlinear mixed boundary value problem containing a time derivative in the boundary condition. (Russian) (**82b:35033**)

35B25 Singular perturbations

- Babič, V. M.** (with Kirpčnikova, N. Ja.) ★The boundary-layer method in diffraction problems. **82b:35013**
- Bensoussan, Alain** (with Lions, Jacques-Louis) Homogénéisation et perturbations singulières. **82b:35014**
- Brauer, C. M.** (with Nicolaenko, B.) Internal layers and free boundary problems. **82a:35009**
- (with Nicolaenko, B.) Singular perturbations and free boundary value problems. **82c:35005**
- Felgenhauer, Andreas** Anwendung von H^1 -Maximumprinzipien auf singular gestörte Probleme zweiter Ordnung. **82j:35011**
- Frank, L. S.** (with van Groesen, E. W.) Singular perturbations of an elliptic operator with discontinuous nonlinearity. **82f:35014**
- (with Wendt, W. D.) Coercive singular perturbations: asymptotics and reduction to regularly perturbed boundary value problems. **82j:35012**
- Geel, R.** Linear initial value problems with a singular perturbation of hyperbolic type. **82k:35009a**
- Nonlinear initial value problems with singular perturbation of hyperbolic type. **82k:35009b**

See also **de Jager, E. M.** **82i:35017**

- Gor'kov, Ju. P.** An application of the method of matching asymptotic expansions. (Russian) **82a:35010**
- van Groesen, E. W.** See **Frank, L. S.** **82f:35014**
- Gueugnon, Michel** Perturbations singulières et noyaux de Poisson. **82c:35006**
- Perturbations singulières et noyaux de Poisson pour les opérateurs frontières homogènes. **82b:35006**
- Habets, P.** Singular perturbations of elliptic boundary value problems. **82g:35010**
- van Harten, Aart** Nonlinear singular perturbation problems: proofs of correctness of a formal approximation based on a contraction principle in a Banach space. **82c:35007**
- Howes, Fred A.** Some singularly perturbed nonlinear boundary value problems of elliptic type. **82c:35008**
- Some two parameter problems for singularly perturbed equations of elliptic type. **82b:35015**
- Perturbed boundary value problems whose reduced solutions are nonsmooth. **82c:35010**
- Hsiao, George C.** (with Weinacht, Richard J.) A singularly perturbed Cauchy problem. **82g:35011**
- Huet, Denise** Proper approximation of a normed space and singular perturbations. **82c:35016**

- de Jager, E. M.** (with Geel, R.) Singular perturbations of hyperbolic type. **82i:35017**
- Kasumov, K. R.** The effect of a singular perturbation on the solution of a mixed problem. (Russian) **82f:35015**
- Kelley, Walter G.** The Dirichlet problem for singularly perturbed quasilinear elliptic equations. **82f:35016**
- Kirpčnikova, N. Ja.** See **Babič, V. M.** **82b:35013**
- (Kraeter, Edward F.) See **Babič, V. M.** et al. **82b:35013**
- Lelikova, E. F.** Asymptotic behavior of the solution of an elliptic equation with a small parameter in a domain with a piecewise smooth boundary. (Russian) **82d:35020**
- Lions, Jacques-Louis** See **Bensoussan, Alain** **82b:35014**
- Lobo-Hidalgo, M.** See **Sánchez-Palencia, Enrique** **82b:35017**
- Madaune-Tort, Monique** Sur un problème de perturbations singulières pour des inéquations variationnelles de type parabolique dégénéré. (English summary) **82b:35016**
- de Mottoni, P.** (with Tesi, Alberto) A singular perturbation approach for a reaction diffusion system arising in nuclear reactor theory. **82d:35021**
- Nazarov, S. A.** Asymptotic behavior with respect to a small parameter of the solution of a second-order differential equation on a manifold with corners. (Russian) **82f:35017**
- Nicolaenko, B.** See **Brauer, C. M.** **82a:35009** and **82c:35005**
- Polk, J. F.** Boundary and interior layers in parabolic equations. **82c:35007**
- Ramanujan, N.** (with Srivastava, U. N.) Singular perturbation problems for systems of partial differential equations of parabolic type. **82j:35013**
- Safarjan, R. G.** See **Safarjan, V. V.** **82d:35023**
- Saigardarov, Ju. Z.** Asymptotic behavior of the solution of the first boundary value problem for a fourth-order elliptic equation with a small parameter multiplying the highest derivatives. (Russian) **82d:35022**
- Sánchez-Palencia, Enrique** (with Lobo-Hidalgo, M.) Perturbation of spectral properties for a class of stiff problems. **82b:35017**
- Safarjan, V. V.** (with Safarjan, R. G.) Diffusion processes with averaging, and propagation of concentrated waves. (Russian. Armenian summary) **82d:35023**
- Srivastava, U. N.** See **Ramanujan, N.** **82j:35013**
- Tesi, Alberto** See **Mottoni, P.** **82d:35021**
- Weinacht, Richard J.** See **Hsiao, George C.** **82g:35011**
- Wendt, W. D.** See **Frank, L. S.** **82j:35012**

secondary classifications:

- Babeško, V. A.** (with Zinčenko, Z. F.) On the theory of directional seismic antennas. (Russian) (**82b:86005**)
- Cimbal, V. M.** The Cauchy problem for a hyperbolic equation with a small parameter multiplying the derivatives. (Ukrainian. Russian summary) (**82c:35054**)
- Cole, Julian D.** See **Kevorkian, Jerry** (**82g:34082**)
- Džavador, M. G.** (with Sabzaliev, M. M.) A boundary value problem for a monochromatic equation degenerating into a monochromatic one. (Russian) (**82c:35027**)
- Fitzpatrick, P. M.** On nonlinear perturbations of linear second order elliptic boundary value problems. (**82b:35050**)
- Howes, Fred A.** Some old and new results on singularly perturbed boundary value problems. (**82c:34066**)
- Kevorkian, Jerry** (with Cole, Julian D.) ★Perturbation methods in applied mathematics. (**82g:34082**)
- Lakshmanan, M.** (with Rajagopal, Krishnamurthy) A singular perturbation theory for the FitzHugh-Nagumo nerve conduction equation. (**82f:35096**)
- Mann-Nachbar, Pauline** On a singular perturbation problem arising in chemical separation studies. (**82a:76070**)
- Nazarov, S. A.** The index of an elliptic boundary value problem with a small parameter multiplying the highest derivative. (Russian. Lithuanian and English summaries) (**82f:35072**)
- Nishioka, Kunio** The degenerate Neumann problem and degenerate diffusions with Venttsel's boundary conditions. (**82c:60139**)
- Rajagopal, Krishnamurthy** See **Lakshmanan, M.** (**82f:35096**)
- Ramanujan, N.** (with Srivastava, U. N.) Singular perturbation problems for systems of partial differential equations of elliptic type. (**82a:35044**)
- Rudjak, V. Ja.** (with Smagulov, Š.) On the hyperbolic modification of the Burgers equation. (Russian) (**82a:35092**)
- Sabzaliev, M. M.** See **Džavador, M. G.** (**82c:35027**)
- Safarjan, R. G.** Some boundary value problems with a small parameter for degenerate diffusion processes and corresponding differential equations. (Russian. Armenian and English summaries) (**82d:60146**)
- Smagulov, Š.** See **Rudjak, V. Ja.** (**82a:35092**)
- Srivastava, U. N.** See **Ramanujan, N.** (**82a:35044**)
- Su, Yu Cheng** Asymptotic solution of mixed singular perturbation problems for second-order quasilinear hyperbolic partial differential equations. (Chinese. English summary) (**82c:35040**)
- Tabata, Masahisa** Approximations monotones de problèmes de perturbations singulières. (English summary) (**82d:65066**)
- Zinčenko, Z. F.** See **Babeško, V. A.** (**82b:86005**)

35B30 Dependence of solutions on initial and boundary data, parameters

- Barnsley, M. F.** Parameter dependence of solutions of classes of quasilinear elliptic and parabolic differential equations. **82f:35018**
- Bochenek, Jan** Dependence of a differential equation on the first eigenvalue of a suitable problem. **82d:35024**
- Hermann, Peter** (with Kersten, Heinrich) Über die stetige Abhängigkeit der Lösung des Neumann-Problems für die Prae-Maxwellischen Gleichungen von ihren Randdaten. **82i:35018**
- Kasumov, K. R.** Dependence of the solution of a mixed problem on perturbation of the boundary. (Russian) **82c:35009**
- Kersten, Heinrich** See **Hermann, Peter** **82i:35018**

- Larkin, N. A. Effect of boundary conditions and the right-hand side on the solvability of a mixed problem for a class of degenerate hyperbolic equations. (Russian) **82m:35007**
 Sjöstrand, Johannes Propagation of analytic singularities for second order Dirichlet problems. III. **82c:35011**
 Wick, J. Zur Abhängigkeit der Lösung von $u_t + (h(u))_x = 0$ von ihren Anfangswerten. (English summary) **82d:35025**

secondary classifications:

- Aron, M. On the continuous dependence of solutions to nonlinear problems in Hilbert space. **(82b:34082)**
 Caillerie, Denis Homogenization of the equation of stationary diffusion in cylindrical domains. **(82f:76032)**
 Halifa, M. E. Continuous dependence of a generalized solution of a mixed problem for a system of hyperbolic-parabolic second-order equations with retarded argument. (Russian) **(82f:35134)**
 Hunt, Fern On the persistence of spatially homogeneous solutions of a population genetics model with slow selection. **(82b:92033)**
 Jochum, Peter Differentiable dependence upon the data in a one-phase Stefan problem. **(82c:35054)**
 Lions, Jacques-Louis On some questions in boundary value problems of mathematical physics. **(82b:35020)**
 Rostamian, Rouben Internal constraints in linear elasticity. **(82j:73016)**
 Russo, Remigio Continuous dependence for the viscous compressible fluids in unbounded domains. (Italian summary) **(82k:76050)**

35B32 Bifurcation

- Alexander, Roger K. (with Fleishman, Bernard A.) Perturbation and bifurcation in a free boundary problem. **82a:35011**
 Brown, K. J. (with Ibrahim, M. M. A.; Shivaji, R.) S-shaped bifurcation curves. **82c:35007**
 Conley, Charles (with Smoller, Joel) Topological techniques in reaction-diffusion equations. **82j:35014**
 Dancer, Edward Norman On the structure of solutions of an equation in catalysis theory when a parameter is large. **82b:35018**
 Ermeux, T. Stability of rotating chemical waves. **82j:35015**
 Fleishman, Bernard A. See Alexander, Roger K., **82a:35011**
 Heinemann, R. F. (with Poore, A. B.) Hopf bifurcation computations for distributed parameter systems. **82a:35012**
 Ibrahim, M. M. A. See Brown, K. J.; et al., **82c:35007**
 Logunov, B. V. Periodic solutions of the problem of waves over a flat bottom. (Russian) **82m:35008**
 de Mottoni, P. (with Schiaffino, Andrea) Bifurcation results for a class of periodic quasilinear parabolic equations. **82g:35012**
 Poore, A. B. See Heinemann, R. F., **82a:35012**
 Reiss, Edward L. Jump phenomena. **82c:35010**
 Rothe, Franz Global existence of branches of stationary solutions for a system of reaction diffusion equations from biology. **82f:35019**
 Schiaffino, Andrea See de Mottoni, P., **82g:35012**
 Schiffmann, Y. The centrality of selection rules in bifurcation theory. (See **82h:81004**)
 Classification in bifurcation theory and reaction-diffusion systems. **82j:35016**
 Sermange, Michel Étude numérique des bifurcations et de la stabilité des solutions des équations de Grad-Shafranov. **82c:35008**
 Shivaji, R. See Brown, K. J.; et al., **82c:35007**
 Smoller, Joel See Conley, Charles, **82j:35014**

secondary classifications:

- Antman, Stuart S. (with Dunn, J. Ernest) Qualitative behavior of buckled nonlinearly elastic arches. **(82d:73031)**
 Aris, Rutherford See Kennedy, Clinton R., **(82b:34053)**
 Belincer, B. N. See Livšic, M. A.; et al., **(82i:92009)**
 Benci, Vieri (with Fortunato, Donato) Does bifurcation from the essential spectrum occur? **(82f:58028)**
 Berestycki, Henri (with Lions, Pierre-Louis) Some applications of the method of super and subsolutions. **(82c:35021)**
 Bissett, Edward J. Interaction of steady and periodic bifurcating modes with imperfection effects in reaction-diffusion systems. **(82c:35046)**
 Brown, K. J. (with Lin, S. S.) On the existence of positive eigenfunctions for an eigenvalue problem with indefinite weight function. **(82a:35080)**
 Claret, Philippe G. (with Rabier, Patrick) ★ Les équations de von Kármán. (French) [The von Kármán equations] **(82g:73030)**
 Clark, David C. See Leung, Anthony W., **(82b:35083)**
 Do, Claude Flambement élastoplastique d'une plaque mince. (English summary) **(82c:73043)**
 Dunn, J. Ernest See Antman, Stuart S., **(82d:73031)**
 Dutton, John A. See Shirer, Hampton N., **(82j:76044)**
 Fleming, G. N. See Gorman, Arthur; et al., **(82i:58018)**
 Fortunato, Donato See Benci, Vieri, **(82f:58028)**
 Gorman, Arthur (with Wells, Robert; Fleming, G. N.) Wave propagation and Thom's theorem. **(82i:58018)**
 Gurija, G. T. See Livšic, M. A.; et al., **(82i:92009)**
 Huang, Daniel T.-J. (with Varma, Arvind) Steady-state and dynamic behavior of fast gas-liquid reactions in nonadiabatic continuous stirred tank reactors. **(82c:80023)**
 Ize, Jorge Periodic solutions of nonlinear parabolic equations. **(82c:58013)**
 Keady, Grant (with Norbury, John) A semilinear elliptic eigenvalue problem. I. **(82m:58018a)**
 (with Norbury, John) A semilinear elliptic eigenvalue problem. II. The plasma problem. **(82m:58018b)**

- Kennedy, Clinton R. (with Aris, Rutherford) Bifurcations of a model diffusion-reaction system. **(82b:34053)**
 Kielhöfer, Hansjörg A bunch of stationary or periodic solutions near an equilibrium by a slow exchange of stability. **(82i:58048)**
 Kriegsmann, Gregory A. See Lange, Charles G., **(82h:73070)**
 Lange, Charles G. (with Kriegsmann, Gregory A.) The axisymmetric branching behavior of complete spherical shells. **(82h:73070)**
 Leung, Anthony W. (with Clark, David C.) Bifurcations and large-time asymptotic behavior for prey-predator reaction-diffusion equations with Dirichlet boundary data. **(82b:35083)**
 Lin, S. S. See Brown, K. J., **(82a:35080)**
 Lions, Pierre-Louis See Berestycki, Henri, **(82c:35021)**
 Livšic, M. A. (with Gurija, G. T.; Belincer, B. N.; Vol'kenstein, M. V.) Positional differentiation as pattern formation in reaction-diffusion systems with permeable boundaries. Bifurcation analysis. **(82i:92009)**
 Logunov, B. V. On the application of vector invariants for determining the general form of the bifurcation equation under conditions of group invariance. (Russian) **(82j:58036)**
 Lorenz, Edward N. Attractor sets and quasigeostrophic equilibrium. **(82j:58082)**
 Mignot, Fulbert (with Puel, Jean-Pierre; Suquet, Pierre-M.) Flambage des plaques élastiques multiperforées. **(82j:73016)**
 (with Puel, Jean-Pierre; Suquet, Pierre-M.) Flambage des plaques élastiques multiperforées. (English summary) **(82h:73050)**
 Nicolis, G. Bifurcations and symmetry-breaking in far from equilibrium systems. **(82c:82026)**
 Norbury, John See Keady, Grant, **(82m:58018)**
 Peitgen, Heinz-Otto (with Schmitt, Klaus) Perturbations topologiques globales des problèmes non linéaires aux valeurs propres. (English summary) **(82a:58019)**
 Pomeau, Y. (with Zaleski, S.) Wavelength selection in one-dimensional cellular structures. (French summary) **(82h:76017)**
 Puel, Jean-Pierre See Mignot, Fulbert; et al., **(82j:73016)** and **(82m:73050)**
 Rabier, Patrick See Claret, Philippe G., **(82g:73030)**
 Reeder, John (with Shinbrot, Marvin) On Wilton ripples. I. Formal derivation of the phenomenon. **(82c:76015)**
 Šapukidze, L. D. On the bifurcation of fluid flows between two rotating permeable cylinders. (Russian. Georgian and English summaries) **(82c:76060)**
 Schmitt, Klaus See Peitgen, Heinz-Otto, **(82a:58019)**
 Shinbrot, Marvin See Reeder, John, **(82c:76015)**
 Shirer, Hampton N. (with Dutton, John A.) The branching hierarchy of multiple solutions in a model of moist convection. **(82j:76044)**
 Sitt, Bernard Sur les instabilités convectives linéaires dans un fluide compressible non dissipatif. (English summary) **(82a:76035)**
 Suquet, Pierre-M. See Mignot, Fulbert; et al., **(82j:73016)** and **(82m:73050)**
 Varma, Arvind See Huang, Daniel T.-J., **(82c:80023)**
 Vol'kenstein, M. V. See Livšic, M. A.; et al., **(82i:92009)**
 Wells, Robert See Gorman, Arthur; et al., **(82i:58018)**
 Wright, F. J. The Stokes set of the cusp diffraction catastrophe. **(82h:58020)**
 Zaleski, S. See Pomeau, Y., **(82h:76017)**

35B35 Stability, boundedness

- Iwaniec, Tadeusz (with Kopiecki, Ryszard) Stability in the differential equations for quasiregular mappings. **82f:35020**
 Kopiecki, Ryszard See Iwaniec, Tadeusz, **82f:35020**
 Yamaguchi, Masaru Existence and stability of bounded and almost periodic solutions of perturbed quasilinear partial differential equations of standard types. **82m:35009**
 Zubov, V. I. Stability of solutions of systems of partial differential equations. (Russian) **82m:35010**

secondary classifications:

- Al-Amood, Naji See Carr, Jack, **(82h:34061b)**
 Alekseev, A. S. Stability of equilibrium states in function phase spaces in distributed systems. (Russian) **(82c:35078)**
 Arneodo, A. See Langford, W. F.; et al., **(82i:58074)**
 Augustynowicz, Krystyna (with Czech, Adam) A stability criterion for parabolic partial differential equations based on the Bihari lemma. (Polish. Russian and English summaries) **(82b:35086)**
 Carr, Jack (with Malhardeen, M. Z. M.) Stability of nonconservative linear systems. **(82h:34079)**
 (with Al-Amood, Naji) Rate of decay in critical cases. II. Infinite-dimensional problems. **(82h:34061b)**
 Coste, Jean See Langford, W. F.; et al., **(82i:58074)**
 Couillet, P. See Langford, W. F.; et al., **(82i:58074)**
 Czech, Adam See Augustynowicz, Krystyna, **(82b:35086)**
 Drazin, P. G. (with Reid, William Hill) ★ Hydrodynamic stability. **(82h:76021)**
 Ermentrout, G. Bard (with Rinzel, John) One-dimensional λ - ω target patterns: empirical stability tests. **(82d:35053)**
 Henrotay, Pierre Periodic solutions and recurrence for nonlinear Schrödinger equation: a Fourier-mode approach. (French summary) **(82h:76013)**
 Kumar, Ajit (with Nisicenko, V. P.; Rybakov, Ju. P.) Ljapunov stability of scalar charged solitons. (Russian) **(82i:81116)**
 Langford, W. F. (with Arneodo, A.; Couillet, P.; Tresser, C.; Coste, Jean) A mechanism for a soft mode instability. **(82c:58074)**
 Leipholz, Horst ★ Stabilität elastischer Systeme. (German) [Stability of elastic systems] **(82j:7301a)**
 ★ Stability of elastic systems. **(82j:7301b)**
 Stability analysis of nonconservative systems via energy considerations. **(82c:70027)**
 Malhardeen, M. Z. M. See Carr, Jack, **(82h:34079)**

- Nishitani, V. P. See Kumar, Ajit; et al., (82i:81116)
 Rajagopal, Kumbakonam R. Thermodynamics and stability of non-Newtonian fluids. (82i:76007)
 Reid, William Hill See Drazin, P. G., (82i:76021)
 Rinzel, John See Ermentrout, G. Bard, (82i:35053)
 Rybakov, Ju. P. See Kumar, Ajit; et al., (82i:81116)
 Sebold, Wolfgang Stability theory for inhomogeneous collision-free self-gravitating stellar systems. (82i:85004)
 Tresser, C. See Langford, W. F.; et al., (82i:58074)
 Zubov, V. I. ★Проблема устойчивости процессов управления. (Russian) [Problem of stability of control processes] (82i:93028)

35B37 Control [See also 49-XX, 93-XX.]

- Genov, A. (with Petrov, I.) Quenching of oscillations in a nonlinear hyperbolic system. (Russian) (See 82i:76020b)
 Li, Da Qian Comportements limites des solutions de certaines équations paraboliques d'ordre supérieur et leurs applications au contrôle optimal. (English summary) [Limit behaviors of solutions for some parabolic equations of higher order and their applications to optimal control] 82i:35011
 Petrov, I. See Genov, A., (See 82i:76020b)

secondary classifications:

- Avdonin, S. A. On controllability of systems with distributed parameters. (Russian. English summary) (82i:93003)
 Favini, Angelo On stabilizability of some abstract degenerate diffusion processes. (82i:93029)
 van Harten, Aart (with Schumacher, Hans) Feedback control of systems with distributed parameters using a finite number of observers and control inputs. (82i:93056)
 Iskenderov, A. D. (with Tagiev, R. K.) Optimization problems with controls in the coefficients of nonstationary quasilinear equations. (Russian. Azerbaijani and English summaries) (82i:49005)
 Pandolfi, Luciano Output stabilization of a class of boundary value control systems. (82i:93018)
 Schumacher, Hans See van Harten, Aart, (82i:93056)
 Sobin, A. S. Controllability of a nonlinear control system with distributed parameters described by an equation of oscillations. (Russian) (82i:93058)
 Some problems of optimal control for a nonlinear control system described by an oscillation equation. (Russian) (82i:49033)
 Tagiev, R. K. See Iskenderov, A. D., (82i:49005)

35B40 Asymptotic behavior of solutions

- Allikakos, Nicholas D. (with Rostamian, Rouben) Large time behavior of solutions of Neumann boundary value problem for the porous medium equation. 82i:35017
 Bensoussan, Alain Homogenization theory. 82i:35013
 Cheng, Kuo Shun Asymptotic behavior of solutions of a conservation law without convexity conditions. 82i:35008
 Čišljakov, B. N. On the question of stabilization to a polynomial as $|x| \rightarrow \infty$ of the solutions of a class of pseudodifferential equations. (Russian) 82i:35026
 Colombini, Ferruccio (with Spagnolo, Sergio) Non stabilité d'une équation hyperbolique dans le cas de l'homogénéisation des coefficients par rapport au temps. (English summary) 82i:35019
 Dobrohotov, S. Ju. (with Maslov, V. P.) The problem of reflection off the boundary for the equation and finite-zone conditionally periodic solutions. (Russian) 82i:35014
 Evgorov, M. A. Some asymptotic problems for elliptic equations. (Russian) 82i:35011
 Fedorjuk, M. V. Asymptotic behavior of the solution of the Dirichlet problem for the Laplace and Helmholtz equations in the exterior of a thin cylinder. (Russian) 82i:35027
 Fencenko, V. M. (with Hruslov, E. Ja.) Asymptotic behavior of the solutions of differential equations with strongly oscillating and degenerating coefficient matrix. (Russian. English summary) 82i:35021
 Galaktionov, V. A. Approximate self-similar solutions of equations of heat conduction type. (Russian) 82i:35022
 Gusarov, A. L. Asymptotic behavior of solutions of a parabolic equation in a strip. (Russian) 82i:35019
 Guščin, A. K. On the behaviour as $t \rightarrow \infty$ of solutions of the second mixed problem for a second-order parabolic equation. 82i:35012
 Hruslov, E. Ja. Asymptotic behavior of the solutions of the second boundary value problem in the case of the refinement of the boundary of the domain. (Russian) 82i:35012
 See also Fencenko, V. M., 82i:35021
 Il'in, A. M. Asymptotic behavior of a boundary value problem on the half line for a parabolic equation. (Russian) 82i:35018
 Kaljakin, L. A. Asymptotic behavior of the solution of an elliptic problem with singular perturbation in the case of a saddle point in the limit operator. (Russian) 82i:35023
 Kamai, Yakar Short time asymptotic behavior for parabolic equations. 82i:35019
 Kopáček, Jiří (with Oleinik, O. A.) Asymptotic properties of solutions of systems of equations in elasticity theory. (Russian) 82i:35015
 Kozlov, S. M. Asymptotic behavior at infinity of fundamental solutions of equations with almost periodic coefficients. (Russian. English summary) 82i:35020
 Krivotaeva, S. A. A scheme of the averaging method for studying resonance modes in distributed systems excitable by multifrequency momentary pulse forces. (Russian) 82i:35016
 Kuz'menko, Ju. T. Martin's boundary for elliptic operators in \mathbb{R}^n . (Russian) 82i:35017
 Lions, Jacques-Louis On some questions in boundary value problems of mathematical physics. 82i:35020
 Martin, Robert H., Jr. Asymptotic behaviour of solutions to a class of nonlinear parabolic systems. (See 82i:35002)
 Maslov, V. P. (with Omel'janov, G. A.) Asymptotic soliton-like solutions of equations with small dispersion. (Russian) 82i:35021
 See also Dobrohotov, S. Ju., 82i:35014
 Narazaki, Takashi On the time global solutions of perturbed beam equations. 82i:35013
 Oleinik, O. A. Asymptotic properties of solutions of partial differential equations. (Russian) 82i:35028
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 Omel'janov, G. A. See Maslov, V. P., 82i:35021
 Rostamian, Rouben See Allikakos, Nicholas D., 82i:35017
 Spagnolo, Sergio See Colombini, Ferruccio, 82i:35019
 Strichartz, Robert S. Asymptotic behavior of waves. 82i:35020
 Tkachenko, V. I. Justification of the averaging method on the semiaxis. (Ukrainian. English and Russian summaries) 82i:35014
 secondary classifications:
 Allikakos, Nicholas D. A Liapunov functional for a class of reaction-diffusion systems. (82i:35008)
 Barenblatt, G. I. ★Подобие, автомодельность, промежуточная асимптотика. (Russian) [Similarity, self-similarity, and intermediate asymptotics] (82i:76001a)
 ★Similarity, self-similarity, and intermediate asymptotics. (82i:76001b)
 Bensoussan, Alain (with Lions, Jacques-Louis; Papanicolaou, George C.) ★Asymptotic analysis for periodic structures. (82i:35001)
 Bodonyi, R. J. (with Smith, F. T.) The upper branch stability of the Blasius boundary layer, including nonparallel flow effects. (82i:76046)
 Bubnov, M. A. See Marčuk, G. I., (82i:86002)
 Caillerie, Denis Homogénéisation d'un corps élastique renforcé par des fibres minces de grande rigidité et réparties périodiquement. (English summary) (82i:73063)
 Candelpergher, Bernard (with Nosmas, Jean-Clarence) Solutions asymptotiques de l'équation de Schrödinger stationnaire associée à un potentiel central. (English summary) (82i:81015)
 Cazenave, Thierry Equations de Schrödinger non linéaires en dimension deux. (English summary) (82i:35031)
 Čornýl, B. I. Asymptotic representation of the solution of equations of the electrodynamics of near-surface induction heating of electroconducting shells. (Russian. English summary) (82i:78023)
 Donnelly, Harold Asymptotic expansions for the solutions of certain nonlinear parabolic problems. II. (82i:35048b)
 Asymptotic expansions for the solutions of certain nonlinear parabolic problems. I. (82i:35048a)
 Evans, Lawrence C. A convergence theorem for a chemical diffusion-reaction system. (82i:35088)
 Evgorov, M. A. Estimates of the fundamental solution of a parabolic equation. (Russian) (82i:35035)
 Ewer, J. P. G. The conduction of heat in bodies with varying specific heat capacity. (82i:35051)
 Favorin, V. M. The behavior as $t \rightarrow \infty$ of a solution of the second mixed problem for a three-dimensional wave equation in a domain cylindrical with respect to space variables. (Russian) (82i:35102)
 Behavior as $t \rightarrow \infty$ of solutions of mixed problems for a three-dimensional wave equation in a domain cylindrical with respect to the space variables. (Russian) (82i:35103)
 Fichera, Gaetano Asymptotic behavior of an electrical field around singular points of the conducting surface. (Russian) (82i:31004)
 Fukushima, Masatoshi A generalized stochastic calculus in homogenization. (82i:60145)
 Geymonat, Giuseppe (with Sánchez-Palencia, Enrique) On the vanishing viscosity limit for acoustic phenomena in a bounded region. (82i:76009)
 (Gindikin, S. G.) See Guillemin, Victor; et al., (82i:58085)
 Ginzburg, Jean (with Velo, Giorgio) On a class of nonlinear Schrödinger equations. III. Special theories in dimensions 1, 2 and 3. (82i:35059)
 (with Velo, Giorgio) On a class of nonlinear Schrödinger equations. II. Scattering theory, general case. (82i:35058)
 Gor'kov, Ju. P. Behavior of the solution of a boundary value problem for a stationary equation of Brownian motion. (Russian) (82i:35089)
 Gu, Lian Kun The asymptotic behavior of the solution of the multiphase Stefan problem. (Chinese) (82i:35085)
 Guillemin, Victor (with Sternberg, Shlomo) ★Геометрические асимптотики. (Russian) [Geometric asymptotics] (82i:58085)
 Gusarov, A. L. Liouville theorems for elliptic equations on a cylinder. (Russian) (82i:35030)
 Gusein-zade, M. I. Asymptotic analysis of boundary and initial conditions in the dynamics of thin plates. (82i:73043)
 Hagan, Patrick S. The instability of nonmonotonic wave solutions of parabolic equations. (82i:35096)
 Harčenko, O. P. See Korobčuk, I. V., (82i:35043)
 Hegedüs, J. The asymptotic behavior of the solution of the Cauchy problem for a wave equation with large parameter. (Russian. English summary) (82i:35108)
 Hludnev, A. M. Approximate description of vibrations of a rod of periodic structure with oscillator masses. (Russian) (82i:73056)
 Iosif'jan, G. A. See Oleinik, O. A.; et al., (82i:73010)
 Jurinskii, V. V. On a Dirichlet problem with random coefficients. (82i:60115)
 Kadyrov, R. R. Asymptotic behavior of the solutions of boundary value problems for a second-order parabolic equation as $t \rightarrow \infty$. (Russian) (82i:35073)
 Kato, Tosio Blow-up of solutions of some nonlinear hyperbolic equations. (82i:35128)
 Korobčuk, I. V. (with Harčenko, O. P.) Estimation of solutions of second-order parabolic equations in unbounded domains. (Ukrainian. Russian summary) (82i:35043)
 Lauro, Giuliana (with Renno, Pasquale) On the diffusion of electromagnetic waves in a "cold" plasma. (Italian. English summary) (82i:78006)
 Lions, Jacques-Louis See Bensoussan, Alain; et al., (82i:35001)
 Lukačev, B. Ja. Asymptotic behavior of solutions of equations of hyperbolic type with

- random right-hand side. (Russian) (82i:60116)
- Marčuk, G. I. (with Bubnov, M. A.) On the asymptotic behavior of the solution of linear equations of the dynamics of a baroclinic ocean over long periods of time. (82f:86002)
- Miller-Grużewska, Halina Les propriétés d'un opérateur différentiel apparaissant en mécanique des fluides. (82g:76014)
- Neiland, V. Ja. (with Stepanov, G. Ju.) Laminar and turbulent detached flows. (Russian) (82c:76040)
- Nosmas, Jean-Clarence See Candelpergher, Bernard, (82b:81015)
- Oleinik, O. A. (with Isifjan, G. A.; Tavhelidze, I. N.) The behavior of the solutions of the plane theory of elasticity in the neighborhood of irregular points of the boundary and at infinity. (Russian) (82c:73010)
- Papanicolaou, George C. See Bensoussan, Alain; et al., (82c:35001)
- Peregudov, A. N. Asymptotic behavior of the solution of the second boundary value problem for a quasilinear parabolic system of chemical kinetics. (Russian) (82m:35079)
- Petrov, Vesselin Asymptotics of the scattering amplitude for nonconvex bodies. (82d:35079)
- Rauch, Jeffrey Asymptotic behavior of solutions to hyperbolic partial differential equations with zero speeds. (82d:35061)
- Renno, Pasquale See Lauro, Giuliana, (82f:78008)
- Šafiev, N. K. Asymptotic behavior with respect to the small parameter of the solution of the mixed problem for a hyperbolic equation. (Russian) (82i:35109)
- Sánchez-Palencia, Enrique See Geymonat, Giuseppe, (82c:76089)
- Santini, P. M. Asymptotic behaviour (in t) of solutions of the cylindrical KdV equation. I. (Italian and Russian summaries) (82j:35136a)
- Asymptotic behaviour (in t) of solutions of the cylindrical KdV equation. II. (Italian and Russian summaries) (82j:35136b)
- Šatalov, V. E. See Sternin, B. Ju., (82c:58093)
- Sazonov, V. N. (with Zacepin, S. V.) On statistics of the ensemble of oscillators under excitation. I. Classical nonlinear oscillators excited by a weak external force. (82b:82019)
- Scott, J. F. The long time asymptotics of solutions to the generalized Burgers equation. (82b:76052)
- Seidman, Thomas I. The asymptotic growth of solutions of $-\Delta u = \lambda f(u)$ for large λ . (82j:35066)
- Smith, F. T. See Bodonyi, R. J., (82d:76046)
- Smith, Lance The asymptotics of the heat equation for a boundary value problem. (82m:35117)
- (Stein, Norman) See Barenblatt, G. I., (82c:76001b)
- Stepanov, G. Ju. See Neiland, V. Ja., (82c:76040)
- Sternberg, Shlomo See Guillemin, Victor, (82c:58085)
- Sternin, B. Ju. (with Šatalov, V. E.) Asymptotic behavior in the large of the characteristic Cauchy problem on a complex analytic manifold. (Russian) (82c:58093)
- Suquet, Pierre-M. Sur l'homogénéisation de la loi de comportement d'une classe de matériaux dissipatifs non linéaires. (English summary) (82a:73006)
- Tavhelidze, I. N. See Oleinik, O. A.; et al., (82c:73010)
- Titov, O. V. On certain properties of the equations of the three-dimensional boundary layer. (82m:76023)
- (Van Dyke, Milton) See Barenblatt, G. I., (82c:76001b)
- Velo, Giorgio See Ginibre, Jean, (82c:35058) and (82c:35059)
- Watson, N. A. The asymptotic behaviour of temperatures and subtemperatures. (82f:31004)
- Zacepin, S. V. See Sazonov, V. N., (82b:82019)
- (Zel'dovič, Ja. B.) See Barenblatt, G. I., (82c:76001b)
- Žitarski, N. V. Asymptotic representation and necessary and sufficient conditions for stabilization of the solutions of model parabolic boundary value problems. (Russian) (82i:35088)

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- Kifle, Abiy A sufficient condition for Nikodým type domains. 82g:35013
- Kudinceva, I. G. Liouville-type theorem for solutions of systems of partial differential equations. (Russian) 82i:35024
- Meyer, Yves Estimations L^2 pour les opérateurs pseudo-différentiels. 82g:35014
- Inégalités L^2 à poids pour les opérateurs différentiels. 82g:35015
- Muratbekov, M. B. Coercive estimates for a higher-order differential operator. (Russian) 82m:35013
- Nahusev, A. M. Validity of an a priori estimate. (Russian) 82f:35025
- Pohozhaev, S. I. On subordinate operators of nonlinear equations. (Russian) 82j:35021

secondary classifications:

- Castro, Abel See Kružkov, S. N.; et al., (82m:35070)
- Isifjan, G. A. See Oleinik, O. A., (82c:35024)
- Ivanov, A. V. Two-sided and one-sided Liouville theorems for quasilinear elliptic equations of nondivergence type. (Russian) (82j:35056)
- Kner, Barry F. Parabolic interior Schauder estimates by the maximum principle. (82f:35090)
- Kružkov, S. N. (with Castro, Abel; López, Martín) Schauder bounds and an existence theorem for the solutions of the Cauchy problem for linear and nonlinear parabolic equations. I. (Spanish) (82m:35070)
- López, Martín See Kružkov, S. N.; et al., (82m:35070)
- Oleinik, O. A. (with Isifjan, G. A.) The behavior at infinity of the solutions of second-order elliptic equations in domains with a noncompact boundary. (Russian) (82c:35024)
- Schaefer, Christoph Invariant sets and contractions for weakly coupled systems of parabolic differential equations. (82g:35058)

35B50 Maximum principles

- Bálint, Vojtech Solution of some second-order partial differential equations with a

- boundary condition. (Slovak) 82c:35012
- Chiarenza, Filippo Strong maximum principle for subsolutions of parabolic equations of variational type. (Italian) 82b:35009
- Cosner, Chris A maximum principle for weakly coupled systems of second order partial differential equations with nonnegative characteristic form. 82c:35013
- Fleishman, Bernard A. (with Mahar, Thomas J.) A minimum principle for superharmonic functions subject to interface conditions. 82g:35016
- Himčenko, B. N. See Kamynin, L. I., 82c:35014 and 82f:35026
- Kamynin, L. I. (with Himčenko, B. N.) An isotropic strict extremum principle. (Russian. English summary) 82c:35014
- (with Himčenko, B. N.) Strict extremum principle for a second-order D -(Π, Ω)-elliptically connected operator. (Russian) 82f:35026
- Mahar, Thomas J. See Fleishman, Bernard A., 82g:35016
- Shapiro, Victor L. Upper semicontinuity and the Monge-Ampère differential inequality. 82f:35027

secondary classifications:

- Amano, Kazuo Maximum principles for degenerate elliptic-parabolic equations with Venttsel's boundary condition. (82c:35029)
- Brézis, Haim (with Lions, Pierre-Louis) An estimate related to the strong maximum principle. (Italian summary) (82b:35026)
- Chiarenza, Filippo A maximum principle for the weak subsolutions of second-order linear parabolic equations. (Italian) (82b:35044)
- Himčenko, B. N. See Kamynin, L. I., (82b:35068)
- Kamynin, L. I. (with Himčenko, B. N.) Theorems of Giraud type for second-order parabolic equations admitting of degeneration. (Russian) (82b:35068)
- Lions, Pierre-Louis See Brézis, Haim, (82b:35026)
- Maddalena, Lucia Harnack's inequality for weakly coupled quasilinear parabolic systems. (Italian. English summary) (82f:35097)
- Maugeri, Antonino A maximum principle for the solutions of some variational inequalities of parabolic type. (Italian) (82c:49020)
- Payne, L. E. (with Philippin, G. A.) On maximum principles for a class of nonlinear second-order elliptic equations. (82a:35040)
- Philippin, G. A. See Payne, L. E., (82a:35040)
- Styś, Tadeusz A discrete maximum principle. (82b:65072)

35B60 Continuation and prolongation [See also 58A15, 58A17, 58Hxx.]

- Colton, David L. Schwarz reflection principles for solutions of parabolic equations. 82i:35022
- Hunt, L. R. (with Murray, John; Strauss, M. J.) Liouville's theorem for first-order partial differential operators. 82f:35028
- Murray, John See Hunt, L. R.; et al., 82f:35028
- Strauss, M. J. See Hunt, L. R.; et al., 82f:35028
- Tsuno, Yoshimichi Localization of differential operators and holomorphic continuation of the solutions. 82d:35029
- Holomorphic continuation of solutions of partial differential equations across the multiple characteristic surface. 82f:35029

secondary classifications:

- Glassey, Robert T. Finite-time blow-up for solutions of nonlinear wave equations. (82i:35120)

35B65 Smoothness of solutions

- Azzam, Ali (with Kreyszig, Erwin) On solutions of parabolic equations in regions with edges. 82c:35015
- First boundary value problem for elliptic equations on rectangular regions. (Arabic summary) 82f:35030
- Heffer, Bernard Propagation des singularités pour des problèmes aux limites [d'après R. B. Melrose et J. Sjöstrand]. 82d:35030
- Kreyszig, Erwin See Azzam, Ali, 82c:35015
- Mamedov, I. T. Behavior of the solutions of degenerate quasilinear second-order parabolic equations. (Russian. English summary) 82i:35023
- (Melrose, R. B.) See Heffer, Bernard, 82d:35030
- (Sjöstrand, Johannes) See Heffer, Bernard, 82d:35030

secondary classifications:

- Anzellotti, Gabriele Dirichlet problem and removable singularities for functionals with linear growth. (Italian summary) (82c:49052)
- Azzam, Ali (with Kreyszig, Erwin) Dirichlet boundary data with singularities. (82m:35033)
- Smoothness properties of bounded solutions of Dirichlet's problem for elliptic equations in regions with corners on the boundary. (82a:35037)
- On the mixed boundary value problem for the Poisson equation in domains with corners. (82m:35034)
- Egorov, Ju. V. Solutions of equations of principal type. (Russian) (82f:35058)
- Hanges, Nicholas Parametries and propagation of singularities for operators with noninvolutive characteristics. (82c:35064)
- He Kan Čer Analyticity of solutions of a class of degenerate differential equations. (Russian) (82b:35065)
- Ivrii, V. Ja. Wave fronts of solutions of certain pseudodifferential equations. (Russian) (82c:35085a)
- Wave fronts of solutions of certain hyperbolic pseudodifferential equations. (Russian) (82c:35085b)
- Kreyszig, Erwin See Azzam, Ali, (82m:35033)
- Kubota, Kōji Microlocal parametries for mixed problems for symmetric hyperbolic systems with diffractive boundary. (82m:35097)

- Lions, Pierre-Louis Isolated singularities in semilinear problems. (82g:35040)
 Nappi, Luigi (with Tranchese, Susanna) On the nonlinear Dirichlet problem in a plane angle. (Italian. English summary) (82g:35042)
 Sändig, Anna-Margarete Über das Randverhalten schwacher Lösungen von elliptischen Differentialgleichungen höherer Ordnung in beschränkten Gebieten im \mathbb{R}^n . (82c:35036)
 Sjöstrand, Johannes Propagation of analytic singularities for second order Dirichlet problems. III. (82c:35011)
 Tranchese, Susanna See Nappi, Luigi, (82g:35042)

35B99 None of the above, but in this section

- Biroli, Marco Almost periodicity and asymptotic behavior for the solutions of a nonlinear wave equation. (See 82d:34003)
 Brulinskii, K. V. On the stability of a converging spherical shock wave. (Russian. English summary) 82c:35016
 Estrada, R. (with Kanwal, R. P.) Applications of distributional derivatives to wave propagation. 82c:35018
 Fréman, Nanny Relation, expressed in terms of elliptic integrals, for determining characteristic values and characteristic exponents within stable and unstable regions (bands and gaps) associated with the Mathieu potential. 82c:35017
 Ha T'en Ngoan See Žikov, V. V.; et al., 82f:35032
 Kanwal, R. P. See Estrada, R., 82c:35018
 Kozlov, S. M. See Žikov, V. V.; et al., 82f:35032
 Lebeau, G. Non holonomie dans un problème de diffraction. 82f:35031
 Oleinik, O. A. See Žikov, V. V.; et al., 82f:35032
 Uninskii, A. P. The magnitude of deviation of a solution of a certain type of equation from its corresponding values on the boundary. (Russian) 82c:35019
 Žikov, V. V. (with Kozlov, S. M.; Oleinik, O. A.; Ha T'en Ngoan) Averaging and G-convergence of differential operators. (Russian) 82f:35032

secondary classifications:

- Arya, J. C. (with Bojadziev, G. N.) Time-dependent oscillating systems with damping, slowly varying parameters, and delay. (German summary) (82m:34075)
 Bahvalov, N. S. Averaging of the transport equation for a periodic medium. (Russian) (82g:82030)
 Banerjee, R. S. See Roy Chowdhury, A.; et al., (82f:78001)
 Bojadziev, G. N. See Arya, J. C., (82m:34075)
 Bryszewski, J. (with Górniewicz, L.; Prusko, Tadeusz) An application of the topological degree theory to the study of the Darboux problem for hyperbolic equations. (82f:35127)
 Della Mattia Maderna, Carla (with Salsa, Sandro) Symmetrization in Neumann problems. (82b:35049)
 Ermentrout, G. Bard (with Rinzel, John) Waves in a simple, excitable or oscillatory, reaction-diffusion model. (82c:35061)
 Górniewicz, L. See Bryszewski, J.; et al., (82f:35127)
 Husumdinova, N. V. On conditions for the existence of an intact boundary layer at increasing pressure. (Russian) (82c:76037)
 Koiter, W. T. The intrinsic equations of shell theory with some applications. (82c:73066)
 Malonek, Helmuth Beweis von Eigenschaften der Lösungen reeller partieller Differentialgleichungen höherer Ordnung durch Faktorisierung des Hauptteiles. (82d:35036)
 Matsumoto, E. Behaviour of the stationary singular points in one-dimensional materials with internal state variables. (German summary) (82h:73033)
 McOwen, Robert C. Fredholm theory of partial differential equations on complete Riemannian manifolds. (82g:58082)
 Murat, François Compacité par compensation: condition nécessaire et suffisante de continuité faible sous une hypothèse de rang constant. (82h:46051)
 Nemirovskii, Ju. V. (with Šlemenon, K. M.) Dynamical compactness of wave processes described by linear hyperbolic systems of second-order partial differential equations. (Russian) (82c:35044)
 Olsen, O. H. (with Samuelsen, M. R.) Interaction between solitary wave solutions to a double sine-Gordon equation. (82d:35097)
 Palumbo, Annunziata Sur les ondes non linéaires dispersives et dissipatives en relativité restreinte. (English summary) (82i:83005)
 Prusko, Tadeusz See Bryszewski, J.; et al., (82f:35127)
 Redheffer, Raymond M. (with Walter, Wolfgang) Invariant sets for systems of partial differential equations. I. Parabolic equations. (82h:35050)
 (with Walter, Wolfgang) Invariant sets for systems of partial differential equations. II. First-order and elliptic equations. (82h:35051)
 Rinzel, John See Ermentrout, G. Bard, (82c:35061)
 Rodriguez Montes, Jaime Some regularity properties of complex differential equations. (Spanish. English summary) (82j:34007)
 Roy, T. See Roy Chowdhury, A.; et al., (82f:78001)
 Roy Chowdhury, A. (with Banerjee, R. S.; Roy, T.) A soliton perturbation scheme for 3×3 inverse scattering formalism with application to the problem of self-focussing of polarised wave in a nonlinear medium. (82f:78001)
 Ruderfer, V. I. Zeros of solutions of a certain class of analytic systems. (Russian) (82f:35064)
 Salsa, Sandro See Della Mattia Maderna, Carla, (82b:35049)
 Samuelsen, M. R. See Olsen, O. H., (82d:35097)
 Šlemenon, K. M. See Nemirovskii, Ju. V., (82c:35044)
 Steinberg, Stanley (with Wolf, Kurt Bernardo) Symmetry, conserved quantities and moments in diffusive equations. (82g:35113)
 Struwe, Michael Infinitely many critical points for functionals which are not even and applications to superlinear boundary value problems. (82c:58030)
 Walter, Wolfgang See Redheffer, Raymond M., (82h:35050) and (82h:35051)
 Wolf, Kurt Bernardo See Steinberg, Stanley, (82g:35113)
 Zenisek, Alexander Discrete forms of Friedrichs' inequalities in the finite element method. (French summary) (82m:65108)

35Cxx Representations of solutions

- Ames, W. F. Some ad hoc techniques for nonlinear partial differential equations. 82c:35031

secondary classifications:

- Babić, V. M. (with Kirpichnikova, N. Ja.) ★The boundary-layer method in diffraction problems. (82h:35013)
 Kirpichnikova, N. Ja. See Babić, V. M., (82h:35013)
 Korenev, B. G. ★Задачи теории теплопроводности и термоупругости. (Russian) [Problems of the theory of heat conductivity and thermoelasticity] (82e:80004)
 (Kuester, Edward F.) See Babić, V. M.; et al., (82h:35013)

35C05 Solutions in closed form

- Berglez, Peter Lineare Differentialoperatoren bei einem Paar adjungierter Differentialgleichungen. 82f:35033
 Bicadze, A. V. Exact solutions of a variant of the gravitational field equations. (Russian) 82g:35017
 Decarreau, A. See Ronveaux, A., (See 82h:81004)
 Dolgova, I. M. (with Mel'nikov, Ju. A.) Construction of Green's functions and matrices for equations and systems of the elliptic type. 82f:35034
 Jeffery, E. A. New classical solutions to φ^4 theory. 82f:35035
 Kocić, Vlado Lj. Theorems on nonlinear superpositions. III. Ordinary differential equations. 82f:35037
 Theorems on nonlinear superpositions. II. The general second-order equation. 82f:35036
 Mel'nikov, Ju. A. See Dolgova, I. M., 82f:35034
 Ronveaux, A. (with Decarreau, A.) Classification of the degenerate ellipsoidal coordinate systems where the separation of the Helmholtz equation is possible. (See 82h:81004)
 Szmjdt, Zofia (with Ziemian, Bogdan) Special solutions of the equations $\bar{\partial}u=0$, $Pu=\delta$ for invariant linear differential operators with polynomial coefficients. 82f:35038
 Vitanov, Aleksandr On the solution of a class of generalized hypergeometric differential equations. (Bulgarian) 82g:35018
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secondary classifications:

- (Amaranth, T.) See Jaswon, M. A.; et al., (82m:31010)
 Asral, B. On the regular Cauchy problems for the Euler-Poisson-Darboux equations and the method of ascent. (82m:35118)
 Bogoskii, M. E. Solutions of some problems of vector analysis, associated with the operators div and grad. (Russian) (82m:26014)
 Bragg, L. R. The radial wave and Euler-Poisson-Darboux equations with singular data. (82g:35090)
 Godin, O. A. On the plane wave reflection from a layered half space. (Russian) (82h:73032)
 Hirota, Ryogo Direct methods in soliton theory. (See 82m:35001)
 Jaswon, M. A. (with Shidfar, A.) On a differential equation of Bergman and Schiffer. (82m:31010)
 Matakiev, V. See Zapryanov, Zapryan Dimitrov, (82g:76041)
 McCarthy, Patrick J. Explicit non- $\bar{\partial}$ Hooft rational solutions of the Atiyah-Drinfel'd-Hitchin-Manin instanton matrix equations for $SU(2r)$. (82i:81056)
 Muhamed, Muhamed Ibragim Complex representation of a class of smooth solutions of the Laplace equation. (Russian) (82h:35042)
 (Nigam, S. D.) See Jaswon, M. A.; et al., (82m:31010)
 Ray, John R. Solitary waves in a generalized time-dependent sine-Gordon equation. (82i:35158)
 Sasaki, Takeshi (with Takano, Kyoichi) On Appell's systems of hypergeometric differential equations. (82i:35030)
 Shidfar, A. See Jaswon, M. A., (82m:31010)
 Takano, Kyoichi See Sasaki, Takeshi, (82i:35030)
 Włodarczyk, E. General closed-form solutions of the equations of one-dimensional nonstationary isentropic motions of isotropic elastic media subject to finite deformations. (Polish and Russian summaries) (82h:73018)
 Zapryanov, Zapryan Dimitrov (with Matakiev, V.) An exact solution of the problem of unsteady fully-developed viscous flow in slightly curved porous tube. (Polish and Russian summaries) (82g:76041)
 Znojil, M. Soliton-shaped potentials and the generalized power-series method. (82h:81027)

35C10 Series solutions, expansion theorems

- Ball, John M. Les séries de Fourier non harmoniques et la stabilisation d'une tige vibrante. [Nonharmonic Fourier series and the stabilization of a vibrating rod] (See 82i:35002)
 Benedek, Agnes Ilona (with Panzone, Rafael) An example of Bessel expansion arising from an anomalous boundary differential problem. 82g:35019
 Berg, Lothar Asymptotische Abschätzung inverser Matrizen mit einer Anwendung auf partielle Differentialgleichungen. (English and Russian summaries) 82i:35024
 Panzone, Rafael See Benedek, Agnes Ilona, 82g:35019

secondary classifications:

- Bansal, J. L. On a class of "nonsimilar" solutions of compressible boundary layer equations. (82g:76026)
 Barone, Martin R. (with Caulk, David A.) Special boundary integral equations for approximate solution of Laplace's equation in two-dimensional regions with circular holes. (82i:65074)
 Caulk, David A. See Barone, Martin R., (82i:65074)

- Čerskii, Ju. I. The method of stepwise separation of variables. (Russian) (82d:35014)
- Chen, De Quan See Ji, Xin Hua, (82k:35004)
- Dal Fabbro, Florangela (with Furioli Martinelli, Antonella) The analyticity of the solutions of certain partial differential equations in the neighborhood of singular points. II. (Italian) (82j:35003)
- Dvorjaninov, S. V. Periodic solution of an autonomous singularly perturbed parabolic system. (Russian) (82d:35018)
- Furioli Martinelli, Antonella See Dal Fabbro, Florangela, (82j:35003)
- Ji, Xin Hua (with Chen, De Quan) On partial differential equations of mixed type in n -dimensional real projective space. (Chinese) (82k:35004)
- Niizeki, Shyōzō On a representation of solutions of the Cauchy problem for a semilinear hyperbolic system. II. (82h:35067)

35C15 Integral representations

- Ahiev, S. S. Representations of solutions of some linear operator equations. (Russian) 82i:35025
- Arsenović, M. P. A method for solving the Cauchy problem for the equation $u_{tt} = a^2 u_{xx} + f(x, t)$. (Serbo-Croatian. English summary) 82f:35039
- Azzam, Ali (with Kreyszig, Erwin) On Bergman operators of exponential type. 82j:35022
- Bakievich, N. I. The connection between the solutions of a fourth-order equation from the theory of the filtration of a fluid with a free surface and the solutions of the heat equation. (Russian) 82i:35026
- Bauer, Karl Wilhelm Determination and application of Vekua resolvents. (See 82m:34003)
- Čelebi, A. Okay Integral operators that generate solutions for a class of partial differential equations. (Turkish summary) 82k:35015
- Černjave, A. P. Discovery of solutions of source-sink type for the potential of generalized Cauchy-Riemann systems of a certain type. (Russian) 82m:35014
- Erofeenko, V. T. Mutual re-expansion of cylindrical wave functions referred to different frames of reference. (Russian. English summary) 82i:35027
- Galazjuk, V. A. The method of Chebyshev-Laguerre polynomials in a mixed problem for a second-order linear differential equation with constant coefficients. (Russian. English summary) 82i:35028
- Garifulin, R. M. Analytic solution of some transport equations. (Russian) 82i:35029
- Kozak, P. P. Representation of the solution of a characteristic problem for a system of higher order nonlinear differential equations in the form of a Wiener integral. (Russian) 82g:35020
- Kracht, Manfred (with Kreyszig, Erwin; Schröder, Gunnar) Definitionsprinzipien für Operatoren Bergmanscher Art und einige Anwendungen. 82f:35040
- Kreyszig, Erwin See Kracht, Manfred; et al., 82f:35040 and Azzam, Ali, 82j:35022
- Lanckau, Eberhard Integraloperatoren für Differentialgleichungen gemischten Typs mit drei unabhängigen Veränderlichen. 82e:35018
- General Vekua operators. 82h:35021
- Lowndes, J. S. On some generalisations of the Riemann-Liouville and Weyl fractional integrals and their applications. 82k:35016
- Milewski, Jan On Niculescu problem for the iterated ultraparabolic equation. 82g:35021
- Püngel, Jürgen Riemannfunktionen mit speziellen Potenzreihenentwicklungen. (English summary) 82e:35019
- Riemann functions for associated operators. 82j:35023
- Pytel-Kudela, Marzenna On Fourier's problem for the heat equation and for the exterior of the sphere. 82g:35022
- Richter, Herbert Zur Äquivalenz zweier Lösungsdarstellungen eines Anfangs-Randwertproblems für eine hyperbolische Differentialgleichung. 82j:35024
- Šalaginov, S. D. The Cauchy problem for the Laplace equation in a complex space. (Russian) 82f:35041
- Sasaki, Takeshi (with Takano, Kyoichi) On Appell's systems of hypergeometric differential equations. 82i:35030
- Schröder, Gunnar See Kracht, Manfred; et al., 82f:35040
- Sprössig, Wolfgang Lösungsdarstellungen einer Klasse spezieller Operatorgleichungen. 82a:35020
- Szajlko, Krystyna A certain boundary value problem for the equation $\Delta^2 u(X) = f(X)$ in an angle domain of the Euclidean n -space for $n \geq 5$. 82f:35042
- Takano, Kyoichi See Sasaki, Takeshi, 82i:35030
- Tomantschger, Kurt Walter ★Bergman-Operatoren gewisser formal-hyperbolischer Differentialgleichungen. (German) [Bergman operators of certain formally hyperbolic differential equations] 82k:35017
- Vasil'ev, B. A. A plane stationary problem of the theory of heat conduction for polygonal domains with a boundary condition of the third kind. (Russian) 82m:35015
- Warchulski, Kazimierz On the Fourier problem for the poliparabolic equation. 82g:35023

secondary classifications:

- Boltaev, K. S. See Radžabov, N., (See 82m:34002)
- Chorlton, F. General integral transforms. (82f:44002)
- Gabov, S. A. Applications of angular potential. On the solution of a problem of Poincaré. (Russian) (82j:31002)
- Grat, I. M. Integral solutions of the Laplace equation. (Russian) (82e:31010)
- Hoang Din' Zung An integral representation of p -analytic functions with a logarithmically harmonic characteristic p . (Russian) (82j:30072)
- Jamusauskas, A. I. On the analytic theory of degenerate elliptic equations. (Russian) (82k:35048)
- Kagan, G. M. On a class of singular problems satisfying the Huygens principle. (Russian) (82k:35082)
- Kovalek, I. M. The representation of solutions of some equations with functional derivatives with the aid of the Wiener integral. (Russian. English summary) (82i:35163)
- Kruglova, S. P. (with Lomonos, L. N.) Special Cauchy problem for a class of fourth-order elliptic equations. (Russian) (82h:35028)
- Li, Yu Chia Applications of the Fourier-Wiener transform to differential equations on

infinite-dimensional spaces. I. (82k:35098)

- Lomonos, L. N. See Kruglova, S. P., (82h:35028)
- Magnaradze, L. G. Construction of a general representation of the solutions of a class of plane elliptic systems of differential equations and of the matrices of their fundamental solutions. (Russian. Georgian and English summaries) (82j:35053)
- Milewski, Jan On the Green function and Cauchy-Dirichlet problem for polyparabolic equation. (82a:35053)
- Radžabov, N. (with Boltaev, K. S.) The solution of boundary value problems for the Euler-Poisson-Darboux equation in the case of a strip. (Russian) (See 82m:34002)
- Tarhanov, N. N. Integral representation of solutions of systems of first-order linear partial differential equations and some of its applications. (Russian) (82j:35030)
- Zayed, Ahmed I. Hyperfunctions as boundary values of generalized axially symmetric potentials. (82f:31002)

35C20 Asymptotic expansions

- Bauer, M. G. Le problème de Neumann-Kelvin. I. Développement asymptotique de la partie oscillante de la solution élémentaire. 82h:35022a
- Le problème de Neumann-Kelvin. II. Développement asymptotique de la partie symétrique de la solution élémentaire. 82h:35022b
- Kaljakin, L. A. A method for matching asymptotic expansions in some linear problems of magnetohydrodynamics with singular perturbation. (Russian) 82h:35010
- Lardner, R. W. Second-order solution of a nonlinear wave equation. 82f:35043
- Müller-Kirsten, H. J. W. Multidimensional perturbation theory for nonseparable wave equations. 82h:35023
- Nesterova, T. N. Asymptotic behavior of a solution of the Burgers equation in the neighborhood of the merging of two lines of discontinuity. (Russian) 82i:35031
- Roos, Hans-Görg (with Tobiska, Lutz) Die asymptotische Lösung spezieller Wärmeleitungsprobleme in Strömungen. 82k:35018
- Šatalov, V. E. Global asymptotic expansions in the characteristic Cauchy problem for complex-valued analytic functions. (Russian) 82h:35024
- Sulimov, M. G. Nonsmooth terms in the asymptotics of the solution of a biharmonic equation in the neighborhood of a corner point of the boundary. (Russian) 82j:35025
- Tasmambetov, Ž. N. Construction of asymptotic representations of solutions of some systems of partial differential equations of arbitrary rank. (Russian) (See 82f:34003)
- Tobiska, Lutz See Roos, Hans-Görg, 82k:35018
- Vasilisin, S. A. Approximate solution of a nonlinear partial differential equation by the averaging method. (Russian) 82e:35020

secondary classifications:

- Alinhac, S. ★Équations différentielles: étude asymptotique; applications aux équations aux dérivées partielles. (French) [Differential equations: asymptotic study; applications to partial differential equations] (82f:34063)
- Bulgaru, O. E. An asymptotic method for solving problems of heat conduction for composite materials. (Russian) (82g:80007)
- Colombeau, Jean-François (with Meril, A.) A remark on equations $y'' + p_1 y' + p_2 y = 0$ at an irregular singular point. (82j:34061)
- Combes, Paul François Amélioration de la théorie géométrique de la diffraction pour les diagrammes des ouvertures circulaires. (English summary) (82d:78018)
- Dobrohotov, S. Ju. (with Maslov, V. P.) Finite gap almost periodic solutions in asymptotic expansions. (82k:58043)
- Duffy, D. J. Uniformly convergent difference schemes for the convection-diffusion equation. (82d:80011)
- Eidel'man, S. D. See Žitaras, N. V., (82a:35054)
- Gabov, S. A. (with Svešnikov, A. G.; Šatov, A. K.) On the theory of steady waves on the surface of a spherical layer of a stratified liquid. (Russian) (82f:76007)
- See also Varlamov, V. V., (82e:76018)
- Henye, Frank S. Improved ray description of wave equations. (82d:78004)
- Hsiao, George C. (with Weinacht, Richard J.) A singularly perturbed Cauchy problem. (82g:35011)
- Jamusauskas, A. I. Application of the Poincaré method in the analytic theory of partial differential equations. (Russian. Lithuanian and English summaries) (82m:35054)
- Kačarov, A. P. The pattern of sound wave scattering on a convex shell. (82g:76029)
- Krivošaja, S. A. See Mitropol'skii, Ju. A., (82j:35094)
- Maslov, V. P. See Dobrohotov, S. Ju., (82k:58043)
- Meril, A. See Colombeau, Jean-François, (82j:34061)
- Mitropol'skii, Ju. A. (with Krivošaja, S. A.) Asymptotic solution for a class of boundary value problems. (Russian) (82j:35094)
- Polk, J. F. Boundary and interior layers in parabolic equations. (82e:35007)
- Ryžov, O. S. Asymptotic methods in fluid dynamics. (Russian) (82e:76002)
- Šatov, A. K. See Gabov, S. A.; et al., (82f:76007)
- Svešnikov, A. G. See Gabov, S. A.; et al., (82f:76007)
- Tkačenko, V. I. Justification of the averaging method on the semiaxis. (Ukrainian. English and Russian summaries) (82k:35014)
- Varlamov, V. V. (with Gabov, S. A.) Application of Watson's method to a problem of the theory of waves on the surface of a heavy fluid. (Russian) (82e:76018)
- Weinacht, Richard J. See Hsiao, George C., (82g:35011)
- Zinn-Justin, J. Expansion around instantons in quantum mechanics. (82f:81034)
- Žitaras, N. V. (with Eidel'man, S. D.) Asymptotic representation and necessary and sufficient conditions for stabilization of the solutions of model parabolic boundary value problems. (Russian) (82a:35054)

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- Bahrvak, N. S. Homogenization and perturbation problems. 82f:35044
- Baraniski, Feliks On a certain boundary problem for the Helmholtz equation and for the quart-plane. 82i:35032
- On the Green function for a certain class of spherical sectors. 82i:35033
- On a certain limit problem for the heat conduction equation and for triangular plate. 82i:35034

- On a certain limit problem for the heat conduction equation and any angular time spatial domain. (Russian) **82j:35035**
- Bicadze, A. V. A system of nonlinear partial differential equations. (Russian) **82h:35011**
- Florian, H. (with Pöngel, Jürgen) Riemannfunktionen als Lösungen gewöhnlicher Differentialgleichungen. (English summary) **82d:35032**
- Greenberg, J. M. (with Hu, S. C.) The initial value problem for a stretched string. **82a:35021**
- Homa, G. P. Asymptotic methods for investigating wave solutions of second-order partial differential equations. (Russian) **82h:35019**
- Hu, S. C. See Greenberg, J. M., **82a:35021**
- Koornwinder, Tom H. A precise definition of separation of variables. **82h:35025**
- Koprinski, S. C. Operators from the Mikusiński field related to the generalized equation of heat conductivity with constant coefficients and polynomial boundary conditions. (Bulgarian, Russian and English summaries) **82c:35009**
- Lerman, L. B. (with Tereščenko, M. I.; Skurs'kii, P. P.) Application of normal-regular solutions to problems of wave propagation in continuous-layered media. (Ukrainian, English and Russian summaries) **82h:35020**
- Mikhailov, L. G. On the representation of solutions of a second-order partial differential equation on the plane by holomorphic functions. (Russian, Tajiki summary) **82j:35026**
- Plešinskaja, I. E. Some nonintegral representations of solutions of linear elliptic and hyperbolic systems of first-order partial differential equations. (Russian) (See **82i:35004**)
- Pöngel, Jürgen. See Florian, H., **82d:35032**
- Raspopov, V. E. (with Šapeev, V. P.) D-properties of certain second-order equations. (Russian) **82f:35045**
- Raspopova, N. S. On the question of uniform convergence of the quasireversibility method. (Russian) **82m:35016**
- Šapeev, V. P. See Raspopov, V. E., **82f:35045**
- Skurs'kii, P. P. See Lerman, L. B.; et al., **82h:35020**
- Smereka, I. P. Construction of periodic solutions for a class of nonlinear partial differential equations by means of special Ateb functions. (Russian) **82m:35017**
- Tereščenko, M. I. See Lerman, L. B.; et al., **82h:35020**
- Wallner, Herbert. ★Riemann-Funktionen als Lösungen partieller Differentialgleichungssysteme. (German) (Riemann functions as solutions for systems of partial differential equations) **82i:35036**
- ★Bergman-Operatoren und Riemann-Funktion bei einer Klasse formalhyperbolischer Differentialgleichungen. (German) (Bergman operators and Riemann function in a class of formal hyperbolic differential equations) **82i:35037**
- Wyskup, Michal. On a nonlinear equation of the type of nonstationary filtration. **82j:35027**
- secondary classifications:
- Anikonov, Ju. E. Formulas for ray and time. (Russian) **82d:86005**
- Antanovskii, L. K. Complex representation of solutions of a problem with free boundary for the Stokes system. (Russian) **82m:35123**
- Bakiev, N. I. The relation between the solutions of the filtration equation for a fluid in cracked rocks and the heat equation. (Russian) **82f:76034**
- Bamberger, Alain (with Cabannes, Henri) Mouvement d'une corde vibrante soumise à un frottement solide. (English summary) **82h:73051**
- Bauer, Karl Wilhelm (with Ruscheweyh, Stephan) ★Differential operators for partial differential equations and function theoretic applications. **82d:35012**
- Blanchard, Ph. (with Brüning, Erwin) Über spezielle Klassen von Lösungen der nicht-linearen hyperbolischen Gleichung $\square_x u = F(u)$. (English summary) **82a:35071**
- Borovik, A. E. (with Robuk, V. N.) Linear pseudopotentials and conservation laws for the Landau-Lifschitz equation, describing the nonlinear dynamics of a ferromagnet with uniaxial anisotropy. (Russian, English summary) **82i:82016**
- Brüning, Erwin. See Blanchard, Ph., **82a:35071**
- Burikina, M. L. (with Meglinskii, V. V.) Solutions of metaharmonic equations of the theory of thick isotropic plates for generalized symmetric problems. (Russian, English summary) **82j:73042**
- Cabannes, Henri. See Bamberger, Alain, **82h:73051**
- Chen, Benito C. (with Saffman, Philip G.) Steady gravity-capillary waves on deep water. I. Weakly nonlinear waves. **82e:76013a**
- (with Saffman, Philip G.) Steady gravity-capillary waves on deep water. II. Numerical results for finite amplitude. **82e:76013b**
- Clements, David L. ★Boundary value problems governed by second order elliptic systems. **82h:35039**
- Colton, David L. Continuation and reflection of solutions to parabolic partial differential equations. **82i:35084**
- Destuynder, Philippe (with Djaoua, Mohamed; Lescure, Sylvie) Une nouvelle méthode de calcul de la singularité pour un problème elliptique posé sur un ouvert avec fente. (English summary) [A new method for computing the singularity for an elliptic problem formulated over a split domain] **82m:65101**
- Djaoua, Mohamed. See Destuynder, Philippe; et al., **82m:65101**
- Dodd, Roger K. (with Morris, Hedley C.; Eagleson, J.) Perturbation theory for the nearly integrable nonlinear equations associated with a modified Zakharov-Shabat scattering problem. **82c:35070**
- Eagleson, J. See Dodd, Roger K.; et al., **82c:35070**
- Erugin, N. P. (with Smirnov, M. M.) Functionally invariant solutions of differential equations. (Russian) **82j:35006**
- Furuta, Yoshito. See Hoshi, Seiichi, **82m:31002**
- Gelfand, I. M. (with Gindikin, S. G.; Graev, M. I.) Integral geometry in affine and projective spaces. (Russian) **82m:43017**
- Gilezan, Kortolan. Equations fonctionnelles pseudo-booleennes généralisées du deuxième ordre. (Serbo-Croatian summary) **82f:35192**
- Gindikin, S. G. See Gelfand, I. M.; et al., **82m:43017**
- Graev, M. I. See Gelfand, I. M.; et al., **82m:43017**
- Hatišvili, G. M. A method of solving general Almansi-Michell problems for isotropic cylindrical bodies. (Russian) **82f:73030**
- Hoshi, Seiichi (with Furuta, Yoshito) On special functions of quaternion functions. **82m:31002**
- Kalnins, E. G. (with Miller, Willard, Jr.) Killing tensors and nonorthogonal variable separation for Hamilton-Jacobi equations. **82j:53033**
- Kapur, J. N. Solution of the conjugate boundary value problem of mass transfer in circular duct dialysers by using Galerkin's method. **82h:92007**
- Kečkić, Jovan D. Applications of functional equations to differential equations. (Serbo-Croatian summary) **82g:34004**
- Kil'čev'skii, M. O. (with Ša'da, L. M.) Self-similar motions of a system consisting of "an elastic shell and a liquid". (Russian, English summary) **82d:73035**
- Klink, Helge-Karsten (with Pieper, K.-D.) Über Lösungen von komplexen partiellen Differentialgleichungssystemen. **82h:35006**
- Kowalschuck, W. On self-similarity. (Spanish summary) **82g:00012**
- Kučment, P. A. Representations of solutions of invariant differential equations on some symmetric spaces. (Russian) **82d:43008**
- Lescure, Sylvie. See Destuynder, Philippe; et al., **82m:65101**
- Liamosi, Albert. A method for the calculus of Bernstein's polynomial. **82c:32017**
- McCreary, J. P. A linear stratified ocean model of the equatorial undercurrent. **82h:86002**
- Meglinskii, V. V. See Burikina, M. L., **82j:73042**
- Meinguet, Jean. From Dirac distributions to multivariate representation formulas. **82g:46080**
- Miller, Willard, Jr. See Kalnins, E. G., **82j:53033**
- Morris, Hedley C. See Dodd, Roger K.; et al., **82c:35070**
- Nikolic-Despotović, Danica. One type of random diffusion equation. (Serbo-Croatian summary) **82g:35125**
- Nishimoto, Yoshihiko. Asymptotic reduction of a certain boundary value problem arising from the density wave theory of spiral galaxies. **82g:85003**
- Petrovskaja, M. S. Solution of continuous and discrete boundary value problems. (Russian, English summary) **82m:86008**
- Pieper, K.-D. See Klink, Helge-Karsten, **82h:35006**
- Poručikov, V. B. Solution of dynamic problems of the theory of elasticity for wedge-like regions with mixed boundary conditions. **82h:73010**
- Reiss, Edward L. Jump phenomena. **82c:35010**
- Robuk, V. N. See Borovik, A. E., **82i:82016**
- Ruscheweyh, Stephan. See Bauer, Karl Wilhelm, **82d:35012**
- Saffman, Philip G. See Chen, Benito C., **82e:76013a** and **82e:76013b**
- Ša'da, L. M. See Kil'čev'skii, M. O., **82d:73035**
- Šapovalov, V. N. Separation of variables in a second-order linear differential equation. (Russian) **82d:35015**
- Singh, M. C. Group theoretic analysis of similarity transformations with applications to the nonhomogeneous and nonlinear problems of wave propagation. (See **82h:81004**)
- Smirnov, M. M. See Erugin, N. P., **82j:35006**
- Tomantschger, Kurt Walter. Allgemeine Darstellungssätze für die Lösungen einer elliptischen Differentialgleichung. (English summary) **82d:35042**
- Travkin, Ju. I. A method for solving a mixed problem of elasticity theory for a strip. **82a:73010**
- Tutschke, Wolfgang. Boundary value problems for generalized analytic functions of several complex variables. **82f:30053**
- Vitanov, Aleksandr. A class of solutions of differential equations describing steady-state processes in a medium with variable parameters. (Russian, Bulgarian and English summaries) **82m:76063**
- Volkmer, Hans. Integralrelationen mit variablen Grenzen für spezielle Funktionen der mathematischen Physik. **82j:35017**
- Fractional calculus and its applications. ★On fractional calculus and its applications. **82h:26003**
- Symposium: Fractional Calculus and its Applications. ★On fractional calculus and its applications. **82h:26003**
- ### 35Dxx Generalized solutions
- #### 35D05 Existence of generalized solutions
- Arhipov, V. P. An approach to the solution of degenerate differential equations. (Russian, Lithuanian and English summaries) **82h:35012**
- Džamalov, K. Generalized solutions of the Dirichlet problem in spaces with a mixed norm. (Russian) **82i:35038**
- Holuhová-Radochová, Věra. Fundamental solutions of the differential operator $(-1)^n D_1^{2n} + a(iD_1)^n + b(iD_2)^n + c$. (Czech summary) **82d:35033**
- Makarov, A. A. Necessary and sufficient conditions for correct solvability of a boundary value problem in a layer for systems of partial differential equations. (Russian) **82c:35021**
- Mosčėnkov, V. B. See Samoilenko, A. M., **82c:35010**
- Samoilenko, A. M. (with Mosčėnkov, V. B.) Iteration methods for solving nonlinear partial differential equations that are nearly linear. (Russian) **82c:35010**
- Sorokina, N. G. Uniqueness of the weak solution of a boundary value problem for the wave equation. (Russian) **82g:35024**
- secondary classifications:
- Chi, Dong Pyo. See Kim, Jongsik; et al., **82i:35007**
- Cho, Tae Geun. See Kim, Jongsik; et al., **82i:35007**
- Dadok, Jiri. Solvability of invariant differential operators of principal type on certain Lie groups and symmetric spaces. **82h:43014**
- Dragieva, N. A. Application of the Galerkin method to the solution of a parabolic equation with two spatial variables in a noncylindrical domain. (Bulgarian, Russian and English summaries) **82h:35071**
- Kim, Jongsik (with Cho, Tae Geun; Chi, Dong Pyo) Necessity of the Nirenberg-Trèves condition. **82i:35007**

(with Kim, Jung Soo; Shin, Joon Kook) Unsolvability of the Mizohata operator. (82b:35003)

Kim, Jung Soo See Kim, Jongsik; et al., (82b:35003)

Kufner, Alois (with Rákosnik, Jiří) Boundary value problems for nonlinear partial differential equations in anisotropic Sobolev spaces. (Czech summary) (82m:35023)

Malovičko, V. O. Boundary value problems for second-order equations with nonnegative characteristic form. (Russian) (82c:35030)

Medeiros, L. A. On the weak solutions of nonlinear partial differential equation. (82j:35099)

Oppezzi, Piro Elliptic systems of Agmon-Douglis-Nirenberg type with variable coefficients, and radiation conditions. (Italian. English summary) (82b:35053)

Rákosnik, Jiří See Kufner, Alois, (82m:35023)

Shin, Joon Kook See Kim, Jongsik; et al., (82b:35003)

Solop, S. A. The existence of solutions in the nonlinear theory of oscillations of Reissner shells of revolution. (Russian) (82j:73062)

Vahrušev, V. A. A boundary value problem for a fifth-order nonlinear equation. (Russian) (82b:35037)

35D10 Regularity of generalized solutions

Blum, H. (with Rannacher, R.) On the boundary value problem of the biharmonic operator on domains with angular corners. 82a:35022

Chen, Lu San (with Lin, Jer San; Yeh, Cheh Chih) On the weak solutions for the Cauchy problem of parabolic equations with discontinuous and unbounded coefficients. 82c:35011

Demichele, Cataldo (with Matteo, Alba) On the removable singularities of the weak solutions of strongly quasilinear equations. (Italian. English summary) 82g:35025

Infantino, Roberto The removable singularities of the weak solutions of linear partial differential equations. (Italian. English summary) 82c:35022

John, O. See Nečas, Jindřich; et al., 82c:35023

Lin, Jer San See Chen, Lu San; et al., 82c:35011

Matteo, Alba See Demichele, Cataldo, 82g:35025

Nečas, Jindřich (with John, O.; Stará, J.) Counterexample to the regularity of weak solution of elliptic systems. 82c:35023

Rannacher, R. See Blum, H., 82a:35022

Stará, J. See Nečas, Jindřich; et al., 82c:35023

Yeh, Cheh Chih See Chen, Lu San; et al., 82c:35011

secondary classifications:

Campanato, Sergio L^p regularity for weak solutions of parabolic systems. (82b:35077) (with Cannarsa, P.) Differentiability and partial Hölder continuity of the solutions of nonlinear elliptic systems of order $2m$ with quadratic growth. (82k:35041)

Cannarsa, P. See Campanato, Sergio, (82k:35041)

Catena, V. Le "wave front set" partiel des distributions et applications. (82c:35028)

Hörmander, Lars Subelliptic operators. (82c:35029)

Kawohl, Bernhard On Liouville theorems, continuity and Hölder continuity of weak solutions to some quasilinear elliptic systems. (82g:35039)

Schoenauer, Marc Quelques résultats de régularité pour un système elliptique avec conditions aux limites couplées. (English summary) (82b:35057)

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secondary classifications:

Chauré, A. Relaxation d'un cristal liquide nématique avec conditions d'ancrage faible aux parois. (English summary) (82j:76006)

Kozlov, S. M. Asymptotic behavior at infinity of fundamental solutions of equations with almost periodic coefficients. (Russian. English summary) (82b:35020)

Szmydt, Zofia (with Ziemian, Bogdan) Special solutions of the equations $Pu=0$, $Pu=\delta$ for invariant linear differential operators with polynomial coefficients. (82f:35038)

Ziemian, Bogdan See Szmydt, Zofia, (82f:35038)

35Exx Equations and systems with constant coefficients [See also 35N05.]

35E05 Fundamental solutions

Cattabriga, Lamberto Some applications of Hironaka's theorem on the resolution of singularities to the study of a fundamental solution for linear partial differential operators. (Italian summary) 82i:35039

Ivanov, L. A. See Kiprijanov, I. A., 82b:35026

Kiprijanov, I. A. (with Ivanov, L. A.) Herglotz-Petrovskii formulas for a class of equations with singularities. (Russian) 82b:35026

secondary classifications:

Fattorini, H. O. Structure theorems for vector-valued ultradistributions. (82f:46045)

Vector-valued distributions having a smooth convolution inverse. (82f:46046)

Hansen, Sönke Uniqueness of the Cauchy problem for convolution equations. (82b:35001)

Holáňová-Radochová, Věra Fundamental solutions of the differential operator $(-1)^m D_1^2 D_2^2 + a(D_1)^2 + b(D_2)^2 + c$. (Czech summary) (82d:35033)

Ortner, Norbert Regularisierte Faltung von Distributionen. II. Eine Tabelle von Fundamentallösungen. (English summary) (82e:46058b)

35E10 Convexity properties

Bratti, Giuliano An application of the closed graph theorem to the solvability of differential systems of the type $Pu=f$, $Qu=0$. (Italian) 82m:35018a

A link between global solvability and solvability over compacts for systems like: $(P(D_x, D_y)u=f, Qu=0)$. 82m:35018a

Nakane, Shizuo P -convexity with respect to differential operators which act on linear subspaces. 82b:35027

Zampieri, Giuseppe An extension of the theorem on surjections between Fréchet spaces. Some of its applications. (Italian) 82m:35018b

Systems of the type $(Pu=f, Qu=g)$ that are not globally solvable. (Italian. English summary) 82m:35018c

A sufficient condition for existence of real analytic solutions of P.D.E. with constant coefficients, in open sets of \mathbb{R}^n . 82m:35019a

A link between C^∞ and analytic solvability for P.D.E. with constant coefficients. 82m:35019b

35E15 Initial value problems

Berg, Lothar Lösung des Goursatschen Anfangswertproblems für lineare partielle

Differentialgleichungen mit holomorphen Vorgaben. (Russian summary) 82f:35046

Gelman, I. V. (with Maz'ja, V. G.) The domination of differential operators with constant coefficients in a half space. (Russian) 82c:35012

Kahramanov, A. Š. Well-posed boundary value problems for partial differential equations in a half space. (Russian. Azerbaijani and English summaries) 82b:35013

Maz'ja, V. G. See Gelman, I. V., 82c:35012

Persson, Jan Partial hyperbolicity and partial Gevrey classes. 82m:35020

secondary classifications:

Nikonov, V. A. See Nikonova, G. A., (82f:35116)

Nikonova, G. A. (with Nikonov, V. A.) The Cauchy problem for partially hyperbolic operators with constant coefficients. (Russian) (82f:35116)

35E20 General theory

Balikov, G. I. On the duality of the spaces of solutions of linear hypoelliptic equations and systems with constant coefficients. (Russian. Bulgarian and English summaries) 82a:35023

Dadok, Jiri (with Taylor, Michael E.) Local solvability of constant coefficient partial differential equations as a small divisor problem. 82b:35014

Ehrenpreis, Leon Reflection, removable singularities, and approximation for partial differential equations. I. 82a:35024

Hansen, Sönke Localizable analytically uniform spaces and the fundamental principle. 82f:35047

Il'kiv, V. S. (with Poliščuk, V. N.) A boundary value problem with nonlocal conditions for differential operators with constant real coefficients. (Ukrainian. Russian summary) 82c:35024

Kufner, A. Estimates of a class of linear differential operators with constant complex coefficients. (Russian) 82c:35025

Poliščuk, V. N. See Il'kiv, V. S., 82c:35024

Rubel, Lee A. (with Taylor, B. A.) An example of a rigid partial differential equation. 82a:35025

Shibata, Yoshihiro δ -well posedness of mixed initial-boundary value problems with constant coefficients in a quarter space. 82b:35015

δ -well posedness of mixed initial-boundary value problems with constant coefficients in a quarter space. II. 82b:35016

Lower bounds at infinity for solutions of differential equations with constant coefficients in unbounded domains. 82b:35021

Taylor, B. A. See Rubel, Lee A., 82a:35025

Taylor, Michael E. See Dadok, Jiri, 82b:35014

secondary classifications:

Diaz, R. A Runge theorem for solutions of the heat equation. (82a:35050)

Kuĉment, P. A. Representations of solutions of invariant differential equations on some symmetric spaces. (Russian) (82b:43008)

Laubin, P. Une variante de la démonstration des propriétés classiques des opérateurs hypoelliptiques à coefficients constants. (English summary) (82j:35040)

Pryde, A. J. Higher order elliptic boundary value problems in spaces with homogeneous norms. (82k:35038)

Sagraloff, Boris Normal solvability of linear partial differential operators in $C^\infty(\Omega)$. (82a:47045)

Uchiyama, Kōichi Characteristic boundary value problems for hyperbolic equations. (82m:35095)

35E99 None of the above, but in this section

Ishimura, Ryuichi Théorèmes d'existence et d'approximation pour les équations aux dérivées partielles linéaires d'ordre infini. 82f:35048

Sehbar, A. Prolongement des solutions holomorphes de certains opérateurs différentiels d'ordre infini à coefficients constants. 82f:35049

Yoshino, Masafumi On the solvability of Goursat problems and a function of number theory. 82j:35029

On the solvability of Goursat problems and a function of number theory. 82j:35028

secondary classifications:

Berenstein, Carlos Alberto An inverse spectral theorem and its relation to the Pompeiu problem. (82b:35031)

Derin, A. A. *Общие вопросы теории граничных задач. (Russian) [General questions of the theory of boundary value problems] (82j:35033)

Drużkowski, Ludwik M. A generalization of the Malgrange-Zerner theorem. (82c:32021)

Ni, Xing Tang Boundary value problems with three characteristic supports for linear

- totally hyperbolic equation of the third order. (82b:35100)
Rodriguez Montes, Jaime Some regularity properties of complex differential equations. (Spanish. English summary) (82j:34007)
Shapiro, Harold S. On some Fourier and distribution-theoretic methods in approximation theory. (82g:41017)
Szék, Árpád Inversion in the multiplier extension of admissible vector modules. (82b:46060)

35Fxx General first-order equations and systems

35F05 Linear equations and systems, general

- Abrahamov, A. M.** On a first-order system which is degenerating at a point. (Russian) (82c:35050)
Froin, V. H. Linear systems of first-order partial differential equations with semiregular degeneration on a hyperplane. (Russian) (82c:35051)
Tarhanov, N. N. Integral representation of solutions of systems of first-order linear partial differential equations and some of its applications. (Russian) (82j:35030)
 secondary classifications:
Baouendi, M. S. (with Trèves, François) A property of the functions and distributions annihilated by a locally integrable system of complex vector fields. (82b:35057)
Campolattaro, A. A. New spinor representation of Maxwell's equations. I. Generalities. (82c:78004a)
 New spinor representation of Maxwell's equations. II. Algebraic properties. (82c:78004b)
Sjöstrand, Johannes Note on a paper of F. Trèves concerning Mizohata type operators. (82b:58085)
Trèves, François See Baouendi, M. S., (82b:35057)
Truppo, V. A. Affine geometry of the manifold $E(0, n-1, 2n-2)$ associated with a first-order partial differential equation. (Russian) (82c:53011)

35F10 Initial value problems for linear equations and systems

35F15 Boundary value problems for linear equations and systems

- Nuraboev, M.** Boundary problems for a first-order system with lowest terms. (Russian. Turkmen summary) (82j:35031)
Šugrin, S. M. Strong and weak extensions of differential operators. II. (Russian) (82j:35052)
Yamada, Haruki Boundary value problems for real linear partial differential equations of first order. (82b:35028)
 secondary classifications:
Konjaev, Ju. A. Some questions of the theory of asymptotic integration. (Russian) (82b:34075)

35F20 Nonlinear equations and systems, general

- Goldschmidt, Bernd** Eigenschaften der Lösungen elliptischer Differentialgleichungen erster Ordnung in der Ebene. (82d:35034)
Kaden, Frieder Lösung partieller komplexer Differentialgleichungen in lokalkonvexen Räumen. (82c:35040)
Lions, Pierre-Louis Solutions généralisées des équations de Hamilton-Jacobi du premier ordre. (English summary) [Generalized solutions of first-order Hamilton-Jacobi equations] (82j:35041)
Tajimuratov, I. The structure of solutions of a linear system of first-order partial differential equations with periodic coefficients of a special type. (Russian) (82j:35042)
Valent, Tullio (with Zampieri, Giuseppe) The differentiability of an operator connected with a class of quasilinear differential systems. (Italian. English summary) (82j:35053)
Vil'fancev, V. P. Local construction of a completely integrable differential system with singularities. (Russian) (82c:35022)
Zampieri, Giuseppe See Valent, Tullio, (82j:35053)

secondary classifications:

- Šugrin, S. M.** Galilean systems of differential equations. (Russian) (82b:35064)
Wick, J. Zur Abhängigkeit der Lösung von $u_\nu + h(u_\nu) = 0$ von ihren Anfangswerten. (English summary) (82d:35025)

35F25 Initial value problems for nonlinear equations and systems

- Brandi, Primo** (with Ceppitelli, Rita) On the existence of the solution of nonlinear functional partial differential equations of the first order. (82m:35021)
Ceppitelli, Rita See Brandi, Primo, (82m:35021)
Hasanova, M. G. Calculation of the Puiseux index of certain matrix differential operators. (Russian) (82b:35029)

secondary classifications:

- Leaci, Antonio** (with Vergara Caffarelli, Giorgio) Generalized variational solutions of the Cauchy problem for Hamilton-Jacobi equations. (82d:49022)
Vergara Caffarelli, Giorgio See Leaci, Antonio, (82d:49022)

35F30 Boundary value problems for nonlinear equations and systems

secondary classifications:

- Klink, Helge-Karsten** Über komplexe Methoden in der Kontrolltheorie: ein Dirichlet-Problem. (82e:49029)

- Moroşanu, Gheorghe** Existence for nonlinear differential systems of hyperbolic type. (82j:35122)

Sylvain, M. See Zerner, M., (82m:35072)

- Zerner, M.** (with Sylvain, M.) Équations d'évolution quasi-linéaires du premier ordre: le cas lipschitzien. (Italian summary) [First-order quasilinear evolution equations: the Lipschitz case] (82m:35072)

35F99 None of the above, but in this section

secondary classifications:

- Pommaret, Jean-François** Théorie de Galois des systèmes dynamiques. (English summary) (82g:12028)

35Gxx General higher-order equations and systems

secondary classifications:

- Skorobogat'ko, V. Ja.** ★Исследования по качественной теории дифференциальных уравнений с частными производными. (Russian) [Investigation in the qualitative theory of partial differential equations] (82d:35004)

35G05 Linear equations and systems, general

- Kitagawa, Keiichiro** (with Sadamatsu, Takashi) Sur le problème de Cauchy pour un système d'équations aux dérivées partielles. (82b:35023)
Mosčenkova, V. B. Uniform invertibility of a linear differential operator. (Russian) (82c:35026)
Sadamatsu, Takashi See Kitagawa, Keiichiro, (82c:35023)
Viglin, E. S. Well-posedness classes of the Cauchy problem for equations with linearly transformed time. (Russian) (82j:35054)

secondary classifications:

- Arhipov, V. P.** An approach to the solution of degenerate differential equations. (Russian. Lithuanian and English summaries) (82b:35012)
Keller, R. G. The essential selfadjointness of differential operators. (82j:35110a)
 The essential selfadjointness of differential operators with positive coefficients. (82j:35110b)
Landau, Eberhard General Vekua operators. (82b:35021)

35G10 Initial value problems for linear equations and systems

- Alinhac, S.** (with Baouendi, M. S.) Construction de solutions nulles et singulières pour des opérateurs de type principal. (82b:35030)
Baouendi, M. S. See Alinhac, S., (82b:35030)
Čaus, M. M. A remark on the behavior of the solutions of the Cauchy problem for an equation with variable coefficients. (Russian) (82j:35026)
Nishitani, Tatsuo On the Lax-Mizohata theorem in the analytic and Gevrey classes. (82b:35017)
Ohya, Yujiro Le problème de Cauchy à caractéristiques multiples. (82a:35026)
Zuily, Claude Unicité du problème de Cauchy pour une classe d'opérateurs différentiels. (82b:35018)

secondary classifications:

- Ét'borai, Mahmoud M.** On the initial value problem for a partial differential equation with operator coefficients. (82b:35148)
Roberts, Gary B. Uniqueness in the Cauchy problem for characteristic operators of Fuchsian type. (82c:35006)

35G15 Boundary value problems for linear equations and systems

- Abdinazarov, S.** General boundary value problems for a third-order equation with multiple characteristics. (Russian) (82j:35032)
Berenstein, Carlos Alberto An inverse spectral theorem and its relation to the Pompeiu problem. (82b:35031)
Burikin, O. Ja. (with Selez'ova, F. G.) Mixed problems for some equations in a Riemannian space that are well-posed in the sense of I. G. Petrovskii. (Russian) (82m:35022)
Dezin, A. A. ★Общие вопросы теории граничных задач. (Russian) [General questions of the theory of boundary value problems] (82j:35033)
Džallor, K. A. On a boundary value problem with an operator of Bessel type. (Russian. Azerbaijani and English summaries) (82j:35034)
Džavadov, M. G. (with Sabzaliev, M. M.) A boundary value problem for a monocharacteristic equation degenerating into a monocharacteristic one. (Russian) (82c:35027)
Gasymov, E. A. On the well-posedness of a mixed problem for an equation of no type. (Russian. Azerbaijani and English summaries) (82j:35035)
Iliev, Bija D. On the boundary problems in a half-space for a class of nonhyperbolic equations with constant strength. (82g:35027)
Romanko, V. K. Conjugation problems for some partial differential equations. (Russian) (82d:35035a)
 The conjugation problem for operator-differential equations. (Russian) (82d:35035b)
Sabzaliev, M. M. See Džavadov, M. G., (82c:35027)
Sarason, Leonard Second-order equations of fixed type in regions with corners. I. (82j:35036)
Selez'ova, F. G. See Burikin, O. Ja., (82m:35022)

secondary classifications:

- Granas, A. (with Guenther, R. B.; Lee, J. W.) Applications of topological transversality to differential equations. I. Some nonlinear diffusion problems. (82b:60146)
- Guenther, R. B. See Granas, A.; et al. (82b:60146)
- Howell, Kenneth B. Uniqueness in linear elastostatics for problems involving unbounded bodies. (82c:73011)
- Lee, J. W. See Granas, A.; et al. (82b:60146)
- Muratbekov, M. B. Coercive estimates for a higher-order differential operator. (Russian) (82m:35013)

35G20 Nonlinear equations and systems, general

- Evans, Lawrence C. On solving certain nonlinear partial differential equations by accretive operator methods. 82b:35032
- Malonek, Helmuth Beweis von Eigenschaften der Lösungen reeller partieller Differentialgleichungen höherer Ordnung durch Faktorisierung des Hauptteiles. (82b:35036)
- Meĭnik, V. S. Boundary control of objects described by a nonlinear mixed boundary value problem containing a time derivative in the boundary condition. (Russian) (82b:35033)

secondary classifications:

- Coron, Jean-Michel Résolution de l'équation $Au + Bu = f$ où A est linéaire et B dérive d'un potentiel convexe. (English summary) (82c:47077)
- Leznov, A. N. (with Savel'ev, M. V.) Representation of zero curvature for the system of nonlinear partial differential equations $x_{a,z} = \exp(kx)_a$ and its integrability. (82f:58045)
- Miyake, Masatake On the Cauchy-Kowalewski theorem for general systems of equations. (Japanese) (82b:35004)
- Mosečnikov, V. B. See Samoilenko, A. M., (82c:35010)
- Neuberger, John W. Iteration for systems of nonlinear partial differential equations. (82f:56066)
- Samoilenko, A. M. (with Mosečnikov, V. B.) Iteration methods for solving nonlinear partial differential equations that are nearly linear. (Russian) (82c:35010)
- Savel'ev, M. V. See Leznov, A. N., (82c:58045)

35G25 Initial value problems for nonlinear equations and systems

- Berisvili, G. D. Structures on Grassmann bundles and the Cauchy problem. (Russian. Georgian and English summaries) 82j:35037
- Borzymowski, Andrzej A Goursat problem for a polyvibrating equation of D. Mangeron. (82b:35034)
- Yoshino, Masafumi On the solvability of nonlinear Goursat problems. 82k:35024

35G30 Boundary value problems for nonlinear equations and systems

- Bahri, Abbas (with Berestycki, Henri) Points critiques de perturbations de fonctionnelles paires et applications. (English summary) 82f:35055
- Berestycki, Henri See Bahri, Abbas, 82f:35055
- Fučík, Svatopluk Nonlinear noncoercive problems. 82f:35056
- Kufner, Alois (with Rákosník, Jiří) Boundary value problems for nonlinear partial differential equations in anisotropic Sobolev spaces. (Czech summary) 82m:35023
- Piatkov, S. G. A third-order nonlinear equation. (Russian) 82g:35028
- Qi, Min You On a class of linear partial differential equations with critical points in the Hamiltonian field. (Chinese) 82b:35035
- Rákosník, Jiří See Kufner, Alois, 82m:35023
- Rybalov, Ju. V. A boundary value problem in a half-space with a boundary condition at infinity. (Russian) 82b:35036
- Šackil, V. P. On a boundary value problem for some singular operators of odd order. (Russian) (See 82m:34004)
- Vahrušev, V. A. A boundary value problem for a fifth-order nonlinear equation. (Russian) 82b:35037
- Wagschal, Claude Le problème de Goursat non linéaire. 82m:35024

secondary classifications:

- Koblov, A. Ja. Nontriviality of infinite order Sobolev spaces in angular domains. (Russian) (82j:46041)
- McKenna, P. J. See Shaw, Howard, (82d:47070)
- Milojević, P. S. Fredholm alternatives and surjectivity results for multivalued A -proper and condensing mappings with applications to nonlinear integral and differential equations. (82a:47051)
- Shaw, Howard (with McKenna, P. J.) On the structure of the set of solutions to some nonlinear boundary-value problems. (82d:47070)

35G99 None of the above, but in this section

- Lipsey, Zolt Boundary value problems of mixed type with nonsmooth boundaries. I. Elliptic case. (Hungarian. English summary) 82m:35025a
- Boundary value problems of mixed type with nonsmooth boundaries. II. Parabolic case. (Hungarian. English summary) 82m:35025b
- Sasaki, Ryu Pseudopotentials for the general AKNS system. 82a:35027

secondary classifications:

- Andronikof, Emmanuel Déterminant, selon M. Sato et M. Kashiwara. (82i:58062)
- Buck, R. Creighton The solutions to a smooth PDE can be dense in $C[1]$. (82k:41011) (Kashiwara, M.) See Andronikof, Emmanuel, (82i:58062)
- (Sato, Mikio) See Andronikof, Emmanuel, (82i:58062)

35H05 Hypoelliptic equations and systems [See also 58Gxx.]

- Amano, Kazuo A necessary condition for hypoellipticity of degenerate elliptic-parabolic operators. 82b:35019

- Hypoellipticity of a class of degenerate elliptic-parabolic operators. 82b:35020
- Baouendi, M. S. (with Trèves, François) A property of the functions and distributions annihilated by a locally integrable system of complex vector fields. 82f:35057
- Bolley, P. (with Camus, J.) Régularité Gevrey et itérés pour une classe d'opérateurs hypoelliptiques. [Gevrey regularity and iterates for a class of hypoelliptic operators] 82k:35025

- Bruno, Teresa Quasielliptic systems and Gevrey classes. (Italian) 82c:35013
- Camus, J. See Bolley, P., 82k:35025
- Catana, V. Le "wave front set" partiel des distributions et applications. 82c:35028
- Callis, David Necessary conditions for subellipticity and hypoellipticity for the $\bar{\partial}$ -Neumann problem on pseudoconvex domains. 82j:35038
- Damlakhi, M. (with Helffer, Bernard) Analyticité et itérés d'un système de champs non elliptique. 82j:35039
- Egorov, Ju. V. Solutions of equations of principal type. (Russian) 82f:35058
- Helffer, Bernard See Damlakhi, M., 82j:35039
- Hörmander, Lars Subelliptic operators. 82c:35029
- Kut'ment, P. A. The absence of L_2 -solutions to periodic partial differential equations. (Russian) 82c:35014

- Langenbruch, Michael Fortsetzung von Randwerten zu hypoelliptischen Differentialoperatoren und partielle Differentialgleichungen. 82a:35028
- Dualraum und Topologie der (lokal) langsam wachsenden Nulllösungen hypoelliptischer Differentialoperatoren. (English summary) 82d:35037
- Laubin, P. Une variante de la démonstration des propriétés classiques des opérateurs hypoelliptiques à coefficients constants. (English summary) 82j:35040
- Lévy-Bruhl, Pierre Résolubilité locale d'opérateurs homogènes invariants à gauche sur des groupes de Lie nilpotents d'ordre deux. (English summary) 82b:35038
- Markarian, V. N. Addition of lower terms preserving hypoellipticity of an operator. (Russian. Armenian and English summaries) 82g:35029
- Métivier, Guy Une classe d'opérateurs non hypoelliptiques analytiques. 82a:35029
- Non-hypoellipticité analytique pour $D_z^2 + (x^2 + y^2)D_z^2$. (English summary) 82b:35039

- Analytic hypoellipticity for operators with multiple characteristics. 82g:35030
- Miller, Kenneth G. Parametrics for hypoelliptic operators on step two nilpotent Lie groups. 82b:35040

- Ōaku, Toshinori Analytic hypoellipticity of a system of microdifferential equations with noninvolutive characteristics. 82m:35026
- Popivanov, Pet'ar R. (with Popov, Georgi St.) Microlocal properties of a class of pseudodifferential operators with multiple characteristics. (Russian) 82d:35038
- Popov, Georgi St. Hypoelliptic operators with multiple characteristics. 82f:35059
- See also Popivanov, Pet'ar R., 82d:35038

- Rothschild, Linda Preiss Nonexistence of optimal L^2 estimates for the boundary Laplacian operator on certain weakly pseudoconvex domains. 82f:35060
- Serra, Elena Invariants and hypoellipticity for a class of pseudodifferential operators. (Italian. English summary) 82i:35043
- Trèves, François Erratum to: "Study of a model in the theory of complexes of pseudodifferential operators" [Ann. of Math. (2) 104 (1976), no. 2, 269-324; MR 54 #14014]. 82i:35044
- See also Baouendi, M. S., 82f:35057

secondary classifications:

- Balikov, G. I. On the duality of the spaces of solutions of linear hypoelliptic equations and systems with constant coefficients. (Russian. Bulgarian and English summaries) (82a:35023)
- Bismut, Jean-Michel Martingales, the Malliavin calculus and Hörmander's theorem. (82b:60114)
- Martingales, the Malliavin calculus and hypoellipticity under general Hörmander's conditions. (82b:60134)
- Cygan, Jacek Subadditivity of homogeneous norms on certain nilpotent Lie groups. (82k:22009)
- D'Angelo, John P. Sharp local bounds for orders of contact. (Russian summary) (82m:32015)
- Grigis, Alain Propagation des singularités au bord d'ouverts de C^* . (82m:32016)
- Langenbruch, Michael Darstellung von Distributionen endlicher Ordnung als Randwerte zu hypoelliptischen Differentialoperatoren. (82j:46057)
- Lévy-Bruhl, Pierre Résolubilité locale et globale d'opérateurs invariants du second ordre sur des groupes de Lie nilpotents. (English summary) (82d:58067)
- Malliavin, Paul C^∞ parametrix on Lie groups and two steps factorization on convolution algebras. (82b:22019)
- Mazet, Pierre Un théorème d'hypoellipticité pour l'opérateur $\bar{\partial}$ sur les espaces de Banach. (English summary) (82b:32033)
- Nishitani, Tatsuo On the Lax-Mizohata theorem in the analytic and Gevrey classes. (82b:35017)
- Parenti, C. (with Rodino, Luigi) Parametrics for a class of pseudodifferential operators. I, II. (82i:35175)
- Popivanov, Pet'ar R. (with Popov, Georgi St.) A priori estimates and some microlocal properties of a class of pseudodifferential operators. (82f:35193)
- Popov, Georgi St. See Popivanov, Pet'ar R., (82f:35193)
- Rodino, Luigi See Parenti, C., (82i:35175)
- Saks, R. S. Boundary value problems for weakly elliptic systems of differential equations. (Russian) (82b:58001)
- Schapiro, Pierre Conditions de positivité dans une variété symplectique complexe. Application à l'étude des microfonctions. (82i:58067)
- Stepanov, V. D. Multipliers generated by hypoelliptic expressions. (Russian) (82j:47066)
- Stroock, Daniel W. The Malliavin calculus and its applications. (82k:60092)
- Svensson, S. Leif Singular differential operators and distributions. (82d:47050)
- Zachmanoglou, E. C. Manifolds of nonanalyticity of solutions of certain linear PDEs. (82i:35009)

35Jxx Elliptic equations and systems [See also 58G05, 58G10.]

secondary classifications:

- Ha T'en Ngoan See Žikov, V. V.; et al., (82f:35032)
- Kozlov, S. M. See Žikov, V. V.; et al., (82f:35032)
- Oganesjan, L. A. (with Ruhovec, L. A.) *Вариационно-разностные методы решения эллиптических уравнений. (Russian) [Variation-difference methods for solving elliptic equations] (82m:65105)
- Oleinik, O. A. See Žikov, V. V.; et al., (82f:35032)
- Ruhovec, L. A. See Oganesjan, L. A., (82m:65105)
- Žikov, V. V. (with Kozlov, S. M.; Oleinik, O. A.; Ha T'en Ngoan) Averaging and G-convergence of differential operators. (Russian) (82f:35032)
- 35J05 Laplace equation, reduced wave equation (Helmholtz), Poisson equation
- Abbasov, Z. G. (with Iskenderov, B. A.; Əlvazov, Ə. G.) Radiation principles for the Helmholtz equation in a cylindrical domain. (Russian. Azerbaijani and English summaries) 82j:35041
- Albanjan, R. A. A mixed boundary value problem for the Laplace equation in an infinite multiply connected domain. (Russian. Armenian and English summaries) 82c:35030
- Angelini, Jean (with Boujot, Jacqueline; Durand, Marc) Sur une propriété de compacité pour la résolution d'un problème de couplage extérieur. (English summary) [On a compactness property for solving an exterior coupling problem] 82j:35042
- Asakura, Fumiaki A remark on the regularity of the solution of the Dirichlet problem in a semi-infinite domain in \mathbb{R}^2 . 82m:35027
- Baldino, R. R. Integral equations for mixed problems: Laplacian and linear elasticity operators. 82a:35030
- Beljaev, S. Ju. (with Kuz'min, Ju. N.) The external Neumann problem for a semi-infinite cylinder. 82f:35061
- Boujot, Jacqueline See Angelini, Jean; et al., 82j:35042
- Chakrabarti, Aloknath A note on Jones's method associated with the Wiener-Hopf technique. 82j:35043
- Dadajan, Ju. G. (with Oganesjan, L. A.) Coordinatewise condensation of a net in the solution of a diffraction problem in domains with corners. (Russian. Armenian summary) 82c:35026
- Durand, Marc See Angelini, Jean; et al., 82j:35042
- Əlvazov, Ə. G. See Abbasov, Z. G.; et al., 82j:35041
- Gartmeier, O. Eine Integralgleichungsmethode für akustische Reflexionsprobleme an lokal gestörten Ebenen. (English summary) 82j:35045
- Hamdi, Mohamed Ali Une formulation variationnelle par équations intégrales pour la résolution de l'équation de Helmholtz avec des conditions aux limites mixtes. (English summary) [Variational formulation by integral equations for solving the Helmholtz equation with mixed boundary conditions] 82c:35027
- Iskenderov, B. A. See Abbasov, Z. G.; et al., 82j:35041
- Janišauskas, A. I. On Lewy's theorem on Hessian zeros of a harmonic function. (Russian) 82c:35015
- Jarmahamedov, Š. The Cauchy problem for the Laplace equation in an infinite domain. (Russian) 82c:35028
- Kapanadze, D. V. Maximal operators and boundary values of solutions of the Poisson equation. (Russian) 82c:35046
- Knauff, Werner (with Kress, Rainer) A modified integral equation method for the electric boundary-value problem for the vector Helmholtz equation. 82a:35039
- Kravchenko, V. F. (with Mošinskii, A. V.) The interdependence of fundamental solutions of the Helmholtz equations in superposed elliptic and cylindrical coordinates. (Russian. English summary) 82c:35041
- Kress, Rainer See Knauff, Werner, 82a:35039
- Kuz'min, Ju. N. See Beljaev, S. Ju., 82f:35061
- Liu, Bao Ping Uniqueness theorems for the Helmholtz equation in three dimensions. (Chinese) 82g:35031
- Lo, Chi Yeung Boundary value problems of generalized axially symmetric Helmholtz equations. 82c:35016
- McLeod, Kevin (with Serrin, James) Uniqueness of solutions of semilinear Poisson equations. 82c:35029
- Mošinskii, A. V. See Kravchenko, V. F., 82b:35041
- Muhammed, Muhammed İbragim Complex representation of a class of smooth solutions of the Laplace equation. (Russian) 82b:35042
- Naghdı, A. K. Closed form eigenfunctions of Laplace's equation in multiply connected regions and applications. 82b:35043
- Narkun, Z. M. The Green function of the Dirichlet problem for the Laplace equation in a strip with N elliptic cuts. (Russian) 82b:35044
- Oganesjan, L. A. See Dadajan, Ju. G., 82b:35026
- Pidipenko, Ju. K. See Zaliznjak, S. N., 82b:35021
- Ramm, Alexander G. On some properties of solutions of Helmholtz equation. 82f:35062
- Šamilo, A. H. On a problem for partial differential equations. (Russian. Azerbaijani and English summaries) 82c:35047
- Serrin, James See McLeod, Kevin, 82c:35029
- Sestopalov, Ju. V. Properties of the spectrum of a class of nonselfadjoint boundary value problems for sets of Helmholtz equations. (Russian) 82f:35063
- Suveika, I. V. On Green functions of fundamental boundary value problems for the Helmholtz equation in the exterior of a compact domain. (Russian) 82i:35048
- Zaliznjak, S. N. (with Pidipenko, Ju. K.) Application of linear methods to the solution of boundary value problems for the Helmholtz equation. (Russian) 82b:35021
- secondary classifications:
- Alber, Hans-Dieter Justification of geometrical optics for nonconvex obstacles. (82g:78002)
- Altımov, Š. A. A boundary value problem. (Russian) (82j:31006)
- Aziz, A. K. (with Kellogg, R. Bruce) Finite element analysis of a scattering problem. (82i:65069)
- Baranicki, Feliks On a certain boundary problem for the Helmholtz equation and for the quart-plane. (82i:35032)
- On the Green function for a certain class of spherical sectors. (82i:35033)
- Barshinger, Richard N. (with Geer, James F.) The electrostatic potential field about a thin oblate body of revolution. (82g:78009)
- Berlin, P. E. On the problem of diffraction by a thin screen. (Russian) (82f:78005)
- Bojarski, Norbert N. Inverse scattering inverse source theory. (82m:35140)
- Colton, David L. (with Kress, Rainer) Iterative methods for solving the exterior Dirichlet problem for the Helmholtz equation with applications to the inverse scattering problem for low frequency acoustic waves. (82f:65124)
- The inverse electromagnetic scattering problem for a perfectly conducting cylinder. (82c:78004)
- Čorny, B. I. Asymptotic representation of the solution of equations of the electrodynamics of near-surface induction heating of electroconducting shells. (Russian. English summary) (82b:78023)
- Fedorjuk, M. V. Asymptotic behavior of the solution of the Dirichlet problem for the Laplace and Helmholtz equations in the exterior of a thin cylinder. (Russian) (82d:35027)
- Felsen, Leopold B. See Idemen, Mithat, (82g:78016)
- Fleishman, Bernard A. (with Mahar, Thomas J.) A minimum principle for superharmonic functions subject to interface conditions. (82g:35016)
- Geer, James F. See Barshinger, Richard N., (82g:78009)
- Gorman, Arthur (with Wells, Robert) A sharpening of Maslov's method for finding asymptotic solutions. (82b:81036)
- Graham, Ivan G. Some application areas for Fredholm integral equations of the second kind. (82b:45002)
- Holford, R. L. Elementary source-type solutions of the reduced wave equation. (82m:76053)
- Hsiao, George C. See Wendland, Wolfgang L.; et al., (82c:31003)
- Idemen, Mithat (with Felsen, Leopold B.) Diffraction of whispering gallery mode by the edge of a thin concave cylindrically curved surface. (82g:78016)
- Kalnins, E. G. (with Miller, Willard, Jr.) Some remarkable R -separable coordinate systems for the Helmholtz equation. (82c:53043)
- Kellogg, R. Bruce See Aziz, A. K., (82i:65069)
- Krasnov, I. P. An integral equation of potential theory. (Russian) (82m:45004)
- Kress, Rainer See Colton, David L., (82f:65124)
- Kriegsmann, Gregory A. (with Morawetz, Cathleen Synge) Solving the Helmholtz equation for exterior problems with variable index of refraction. I. (82b:65097)
- Luk'janov, V. D. Exact solution of the problem of diffraction by the grating of an inclined plane incident wave. (Russian) (82c:78005)
- Mahar, Thomas J. See Fleishman, Bernard A., (82g:35016)
- Miller, Willard, Jr. See Kalnins, E. G., (82c:53043)
- Morawetz, Cathleen Synge See Kriegsmann, Gregory A., (82b:65097)
- Mošinskii, A. V. The method of auxiliary basis functions in waveguide problems of scattering. (Russian) (82a:78019)
- Nazarov, S. A. (with Semenov, B. N.) The connection between stress factors for a plane problem of classical and couple-stress elasticity theory. (Russian) (82g:73013)
- Netuka, Ivan The classical Dirichlet problem and its generalizations. (82b:31018)
- Nicolas, Patrice Un problème de transmission inverse appliqué à la restitution des activités électriques de l'encéphale. (English summary) (82b:92017)
- Prinja, A. K. On the Green's function for heterogeneous media in one-speed transport theory. (82c:82112)
- Ramazanov, M. D. The problem of the flow around a thin wing with a sharp trailing edge of inviscid incompressible fluid. (Russian) (82a:76009)
- Rosenfeld, Aron Marcus (with Timsit, R. S.) The potential distribution in a constricted cylinder: an exact solution. (82m:78010)
- Šalaginov, S. D. The Cauchy problem for the Laplace equation in a complex space. (Russian) (82f:35041)
- Semenov, B. N. See Nazarov, S. A., (82g:73013)
- Sleeman, B. D. Two-dimensional inverse scattering and conformal mappings. (82c:76063)
- Stephan, E. See Wendland, Wolfgang L.; et al., (82c:31003)
- Syed, Ansaruddin The diffraction of electromagnetic waves by a finite perfectly conducting cone. (82b:78021)
- Thompson, Mark The principle of limiting absorption for Laplacians on two-point homogeneous spaces. (82j:58112)
- Timsit, R. S. See Rosenfeld, Aron Marcus, (82m:78010)
- Wells, Robert See Gorman, Arthur, (82b:81036)
- Wendland, Wolfgang L. (with Stephan, E.; Hsiao, George C.) On the integral equation method for the plane mixed boundary value problem of the Laplacian. (82c:31003)
- Williams, Stephen A. Analyticity of the boundary for Lipschitz domains without the Pompeiu property. (82j:31009)
- 35J10 Schrödinger operator [See also 47A40.]
- Bairamogly, M. See Maksudov, F. G., 82m:35028
- Balabane, Mikhael Décroissance des solutions d'équations du type de Schrödinger. Application à leur régularité dans $L^p(\mathbb{R}^n)$. (English summary) 82c:35031
- Cazenave, Thierry Equations de Schrödinger non linéaires en dimension deux. (English summary) 82a:35031
- Əldus, D. M. See Mal'ceva, E. G., 82a:35032
- Əlvazov, Ə. H. Selfadjointness of the Schrödinger operator with singular potential. (Russian) 82d:35040
- Faierman, Melvin (with Knowles, Ian W.) Minimal operators for Schrödinger-type differential expressions with discontinuous principal coefficients. 82b:35022
- Ginibre, Jean (with Velo, Giorgio) Existence of solutions and scattering theory for the nonlinear Schrödinger equation. 82c:35017
- (with Velo, Giorgio) On a class of nonlinear Schrödinger equations with nonlocal interaction. 82c:35018

- Jafaev, D. R. Superpower decrease with respect to time of solutions of the Schrödinger equation. (Russian) **82i:35049**
- Knowles, Ian W. See Fairman, Melvin, **82h:35022**
- Maksudov, F. G. (with Baimogly, M.) The Green function for the operator Schrödinger equation. (Russian. Azerbaijani and English summaries) **82m:35028**
- Mal'ceva, E. G. (with Eidus, D. M.) Expansion of solutions of the Schrödinger equation in solutions of the potential scattering problem. (Russian. English summary) **82a:35032**
- Mizohata, Sigeru On some Schrödinger type equations. **82g:35032**
- Velo, Giorgio See Ginibre, Jean, **82c:35017** and **82c:35018**

secondary classifications:

- Asada, Kenji See Fujiwara, Daisuke, (**82m:81029**)
- Berry, M. V. Quantizing a classically ergodic system: Sinai's billiard and the KKR method. (**82j:81012**)
- Burgan, J. R. See Munier, A.; et al., (**82h:81023**)
- Cameron, R. H. (with Storvick, D. A.) Analytic Feynman integral solutions of an integral equation related to the Schrödinger equation. (**82j:81025**)
- DeWitt-Morette, C. (with Elworthy, K. D.; Nelson, B. L.; Sammelman, G. S.) A stochastic scheme for constructing solutions of the Schrödinger equations. (**82m:81028**)
- Eastham, Michael S. P. See Thurlow, Christine R., (**82b:35125**)
- Elworthy, K. D. See DeWitt-Morette, C.; et al., (**82m:81028**)
- Feix, M. R. See Munier, A.; et al., (**82h:81023**)
- Fijalkow, E. See Munier, A.; et al., (**82h:81023**)
- Fujiwara, Daisuke (with Asada, Kenji) Structure of fundamental solutions of the Schrödinger equation. Convergence of Feynman's path integrals. (Japanese) (**82m:81029**)
- Ginibre, Jean (with Velo, Giorgio) On a class of nonlinear Schrödinger equations. I. The Cauchy problem, general case. (**82c:35057**)
- Guil, F. See Olmedilla, E.; et al., (**82j:58065**)
- Harthong, Jacques La propagation des ondes. (English summary) (**82d:81010**)
- Herbst, Ira W. Exponential decay in the Stark effect. (**82m:81070**)
- Hoffmann-Ostenhof, Maria (with Seiler, R.) Cusp conditions for eigenfunctions of n -electron systems. (**82b:81023**)
- Martinez Alonso, L. See Olmedilla, E.; et al., (**82j:58065**)
- Močanov, S. A. The local structure of the spectrum of the one-dimensional Schrödinger operator. (**82d:35076**)
- Moses, Harry E. Exact solutions for the three-dimensional Schrödinger equation with quasiloal potentials obtained from a three-dimensional Gel'fand-Levitan equation. Examples of totally reflectionless scattering. (See **82h:81117**)
- Müller-Pfeiffer, Erich Oscillation criteria of Nehari type for the Schrödinger equation. (**82f:35007**)
- Munier, A. (with Burgan, J. R.; Feix, M. R.; Fijalkow, E.) Schrödinger equation with time-dependent boundary conditions. (**82h:81023**)
- Nelson, B. L. See DeWitt-Morette, C.; et al., (**82m:81028**)
- Olmedilla, E. (with Martinez Alonso, L.; Guil, F.) Infinite-dimensional Hamiltonian systems associated with matrix Schrödinger operators. (Italian and Russian summaries) (**82j:58065**)
- Paskovskii, V. I. A new method for calculating electromagnetic fields in fine-grained and continuous media. (Russian) (**82g:78005**)
- Ramm, Alexander G. (with Taylor, B. A.) A new proof of absence of positive discrete spectrum of the Schrödinger operator. (**82b:35112**)
- Sammelman, G. S. See DeWitt-Morette, C.; et al., (**82m:81028**)
- Seiler, R. See Hoffmann-Ostenhof, Maria, (**82b:81023**)
- Storvick, D. A. See Cameron, R. H., (**82j:81025**)
- Taylor, B. A. See Ramm, Alexander G., (**82b:35112**)
- Thurlow, Christine R. (with Eastham, Michael S. P.) The existence of eigenvalues of infinite multiplicity for the Schrödinger operator. (**82h:35125**)
- Uroev, V. M. The Cauchy problem for equations of Schrödinger type. (Russian. English summary) (**82c:35034**)
- Velo, Giorgio See Ginibre, Jean, (**82c:35057**)

35J15 Second-order equations, general

- Allegretto, W. Positive solutions and spectral properties of second order elliptic operators. **82h:35023**
- Cibulis, A. B. On the solvability of a quasilinear elliptic equation. (Russian) **82m:35029**
- Dončev, T. A theorem of Phragmén-Lindelöf type. (Bulgarian. Russian and English summaries) **82c:35032**
- Gusarov, A. L. Liouville theorems for elliptic equations on a cylinder. (Russian) **82m:35030**
- Jamžauskas, A. I. On a multidimensional analogue of the A. V. Biczadze system. (Russian) **82d:35041**
- Some classes of mappings associated with the Laplace equation. (Russian. Lithuanian and English summaries) **82a:35033**
- Kružkov, S. N. (with López, Martin) Anisotropic Schauder-type estimates for solutions of elliptic equations. (Russian) **82c:35019**
- Kuz'menko, Ju. T. Positive solutions of elliptic equations in bounded domains. (Russian) **82g:35033**
- López, Martin See Kružkov, S. N., **82c:35019**
- Ruderfer, V. I. Zeros of solutions of a certain class of analytic systems. (Russian) **82f:35064**
- Safonov, M. V. Harnack's inequality for elliptic equations and Hölder property of their solutions. (Russian) **82h:35045**
- Saut, Jean-Claude (with Scheurer, Bruno) Un théorème de prolongement unique pour des opérateurs elliptiques dont les coefficients ne sont pas localement bornés. (English summary) **82c:35020**
- Scheurer, Bruno See Saut, Jean-Claude, **82c:35020**

- Schulz, Friedmar Über die Beschränktheit der zweiten Ableitungen der Lösungen nichtlinearer elliptischer Differentialgleichungen. **82c:35033**
- Tomantschger, Kurt Walter Allgemeine Darstellungssätze für die Lösungen einer elliptischen Differentialgleichung. (English summary) **82d:35042**

secondary classifications:

- Baider, A. (with Feldman, Edgar A.) On oscillatory elliptic equations on manifolds. (**82b:58092**)
- Boucher, G. Problème plan de l'écoulement, autour d'un profil placé sous une ligne libre d'un fluide pesant limité par une paroi. (English summary) (**82h:76008**)
- Chan, C. Y. (with Young, Eutiquio C.) Regular regions for parabolic and elliptic equations. (**82c:35056**)
- Feldman, Edgar A. See Baider, A., (**82b:58092**)
- Habets, P. Singular perturbations of elliptic boundary value problems. (**82g:35010**)
- Himčenko, B. N. See Kamynin, L. I., (**82f:35026**)
- Hruslov, Ė. A. Asymptotic behavior of the solutions of the second boundary value problem in the case of the refinement of the boundary of the domain. (Russian) (**82m:35012**)
- Kaljakin, L. A. Asymptotic behavior of the solution of an elliptic problem with singular perturbation in the case of a saddle point in the limit operator. (Russian) (**82f:35023**)
- Kamynin, L. I. (with Himčenko, B. N.) Strict extremum principle for a second-order $D-(\Pi, \Omega)$ -elliptically connected operator. (Russian) (**82f:35026**)
- Kuz'menko, Ju. T. Martin's boundary for elliptic operators in \mathbb{R}^n . (Russian) (**82a:35017**)
- Mansfield, Lois On mixed finite element methods for elliptic equations. (**82b:65133**)
- Mihailov, L. G. On the representation of solutions of a second-order partial differential equation on the plane by holomorphic functions. (Russian. Tajiki summary) (**82j:35026**)
- Nahšev, A. M. Validity of an a priori estimate. (Russian) (**82f:35025**)
- Poliv'janii, V. O. (with Semenov, Ju. A.) On the theory of generalized diffusion processes. (Russian) (**82m:60070**)
- Semenov, Ju. A. See Poliv'janii, V. O., (**82m:60070**)
- Young, Eutiquio C. See Chan, C. Y., (**82c:35056**)

35J20 Second-order equations, variational methods

- Bazaliĭ, B. V. (with Šelepov, V. Ju.) Variational methods in a mixed problem of thermal equilibrium with a free boundary. (Russian) **82b:35046**
- Colle, Sergio A variational principle for Green's functions approximation. **82a:35030**
- Heersink, R. Über einige Verallgemeinerungen eines elliptischen Randwertproblems von Hadamard. (English summary) **82h:35024**
- Lehmann, Reinhard ★Variationsformulierung elliptischer Randwertaufgaben. (German) [Variational formulation of elliptic boundary value problems] **82g:35034**
- Lions, Pierre-Louis Résolution de problèmes elliptiques quasilineaires. **82a:35034**
- The Choquard equation and related questions. **82h:35047**
- Menzala, Gustavo Perla On regular solutions of a nonlinear equation of Choquard's type. **82a:35035**
- Šelepov, V. Ju. See Bazaliĭ, B. V., **82b:35046**
- von Wolfersdorf, Lothar A modification of the Dirichlet variational problem. **82a:35036**
- Zhang, Gong Qing Variational methods for nondifferentiable functionals and their applications to partial differential equations. **82h:35025**

secondary classifications:

- Acker, Andrew An extremal problem involving current flow through distributed resistance. (**82b:49005**)
- Borodickii, M. P. Investigation of the asymptotic behavior of the solution of a nonstandard variational problem. (Russian) (**82j:49004**)
- Brothers, John E. Invariance of solutions to invariant nonparametric variational problems. (**82b:49067**)
- Díaz Díaz, Jesús Ildefonso Solutions with compact support for certain semilinear problems. (Spanish. English summary) (**82c:49011**)
- Hile, G. N. (with Protter, M. H.) Inequalities for eigenvalues of the Laplacian. (**82c:35052**)
- Lions, Pierre-Louis (with Mercier, Bertrand) Approximation numérique des équations de Hamilton-Jacobi-Bellman. (English summary) (**82b:65055**)
- Mercier, Bertrand See Lions, Pierre-Louis, (**82b:65055**)
- Protter, M. H. See Hile, G. N., (**82c:35052**)
- Rogula, Dominik (with Sztynen, Małgorzata) On one-dimensional models in nonlocal elasticity. (**82b:73004**)
- Šerman, D. I. One particular Dirichlet problem for a doubly connected region whose boundaries are extremely close together in a narrow zone. (**82f:73010**)
- Sztynen, Małgorzata See Rogula, Dominik, (**82b:73004**)
- Tamrazov, P. M. Variational problems of logarithmic potential theory. (Russian) (**82c:31002**)

35J25 Second-order equations, boundary value problems

- Alimov, Š. A. A boundary value problem for an elliptic operator. (Russian) **82j:35044**
- Azzam, Ali On the first boundary value problem for elliptic equations in regions with corners. (Arabic summary) **82m:35031**
- On the Dirichlet problem for the Poisson equation in a rectangle. **82m:35032**
- (with Kreyszig, Erwin) Dirichlet boundary data with singularities. **82m:35033**
- Smoothness properties of bounded solutions of Dirichlet's problem for elliptic equations in regions with corners on the boundary. **82a:35037**
- On the mixed boundary value problem for the Poisson equation in domains with corners. **82m:35034**
- On Dirichlet's problem for elliptic equations in sectionally smooth n -dimensional domains. **82c:35032a**
- (with Kreyszig, Erwin) Mixed boundary value problems for elliptic equations. (Arabic summary) **82h:35031**

- On Dirichlet's problem for elliptic equations in sectionally smooth n -dimensional domains. II. **82c:35032b**
- Schauder-type estimates of solutions of the Dirichlet problem for second-order elliptic equations in piecewise-smooth domains. (Russian. English summary) **82m:35035**
- Benci, Vieri (with Fortunato, Donato) Realizations in $L^2(\Omega)$ of second order differential operators with singular coefficients. (Italian summary) **82f:350.5**
- Berestycki, Henri (with Lions, Pierre-Louis) Some applications of the method of super and subsolutions. **82c:35021**
- Le nombre de solutions de certains problèmes semi-linéaires elliptiques. (English summary) **82c:35033**
- Bove, Antonio (with Franchi, Bruno; Obrecht, Enrico) Boundary value problems for operators like $\Delta + x \cdot \nabla$. (Italian summary) **82j:35045**
- Brezis, Haim (with Lions, Pierre-Louis) An estimate related to the strong maximum principle. (Italian summary) **82b:35026**
- Caffarelli, Luis A. (with Friedman, Avner) Asymptotic estimates for the plasma problem. **82b:35048**
- Carriero, Michele A mixed and transmission problem for the operators $\partial_{x_1}^2 + \partial_{x_2}^2$ and $\partial_{x_1}^2 + \cos^2 \omega \partial_{x_2}^2$ in two adjacent right angles with conditions of Dirichlet and Neumann type—regular oblique derivative on the common half line. (Italian. English summary) **82c:35050**
- Della Mattia Maderna, Carla (with Salsa, Sandro) Symmetrization in Neumann problems. **82b:35049**
- Dossier, A. A. (with Mamedov, Ja. D.) Application of the grid method to the solution of a mixed boundary value problem for elliptic equations in the presence of singularities. (Russian) **82c:35034**
- Fitzpatrick, P. M. On nonlinear perturbations of linear second order elliptic boundary value problems. **82b:35050**
- Fortunato, Donato See Benci, Vieri, **82f:35065**
- Franchi, Bruno See Bove, Antonio; et al., **82j:35045**
- Friedman, Avner See Caffarelli, Luis A., **82b:35048**
- Furusho, Yasuhiro (with Ogura, Yukio) On the existence of bounded positive solutions of semilinear elliptic equations in exterior domains. **82j:35046**
- Gilbarg, David (with Hörmander, Lars) Intermediate Schauder estimates. **82a:35038**
- Gordeziani, D. G. ★О методах решения одного класса нелокальных краевых задач. (Russian) [Methods for solving a class of nonlocal boundary value problems] **82c:35035**
- Hermann, P. (with Kersten, Heinrich) Die Lösung der prä-Maxwellschen Gleichungen mit Hilfe vollständiger Lösungssysteme. (English summary) **82b:35051**
- Hörmander, Lars See Gilbarg, David, **82a:35038**
- Iosif'jan, G. A. See Oleinik, O. A., **82c:35024**
- Kawohl, Bernhard On nonlinear mixed boundary value problems for second order elliptic differential equations on domains with corners. **82c:35022**
- Kersten, Heinrich See Hermann, P., **82b:35051**
- Kibirev, V. V. Construction of solutions of a homogeneous oblique derivative problem. (Russian) **82f:35066**
- Kondrat'ev, V. A. (with Kopáček, Jiří; Oleinik, O. A.) Estimates of solutions of second-order elliptic equations and systems of elasticity theory in the neighborhood of a boundary point. (Russian) **82m:35036**
- Kopáček, Jiří See Kondrat'ev, V. A.; et al., **82m:35036**
- Kozlov, S. M. Asymptotic behavior of fundamental solutions of divergence second-order differential equations. (Russian) **82c:35051**
- Kreyszig, Erwin See Azzam, Ali, **82c:35031** and **82m:35033**
- Kurylev, Ja. V. Boundary conditions on a curve for a three-dimensional Laplace operator. (Russian. English summary) **82c:35023**
- Li, Ming Zhong The generalized Riemann-Hilbert boundary value problem for a system of second-order quasilinear elliptic equations. (Chinese. English summary) **82j:35047**
- Lions, Pierre-Louis See Berestycki, Henri, **82c:35021** and Brezis, Haim, **82b:35026**
- Lossievskaja, T. V. First derivatives of the solution of the Dirichlet problem in the half plane for a second-order elliptic equation with discontinuous coefficients. (Russian) **82f:35067**
- Mamedov, Ja. D. See Dossier, A. A., **82c:35034**
- Meliksetjan, È. P. The Dirichlet problem for elliptic systems of second-order differential equations in some classes in the domain $|z| > 1$. (Russian. Armenian and English summaries) **82c:35052**
- Michael, J. H. Barriers for uniformly elliptic equations and the exterior cone condition. **82c:35053**
- Mihailov, L. G. On a problem of conjugation of the solutions of a second-order partial differential equation on the plane. (Russian) **82c:35054**
- Obrecht, Enrico See Bove, Antonio; et al., **82j:35045**
- Ogata, Akio On the existence and multiplicity theorems for the exterior elliptic boundary value problems. **82b:35027**
- Ogura, Yukio See Furusho, Yasuhiro, **82j:35046**
- Oleinik, O. A. (with Iosif'jan, G. A.) The behavior at infinity of the solutions of second-order elliptic equations in domains with a noncompact boundary. (Russian) **82c:35024**
- See also Kondrat'ev, V. A.; et al., **82m:35036**
- Panejah, B. P. On the theory of the solvability of the oblique derivative problem. (Russian) **82c:35055**
- Peršan, A. V. On a pointwise estimate of a generalized solution to the Dirichlet problem for an elliptic equation in divergence form. (Russian) **82c:35056**
- Pryde, A. J. Second order elliptic equations with mixed boundary conditions. **82f:35068**
- Salsa, Sandro See Della Mattia Maderna, Carla, **82b:35049**
- Szilgyi, P. Solvability of the Dirichlet problem for an elliptic equation with a singularity. (Romanian. English summary) **82c:35036**
- Taira, Kazuaki Sur le problème de la dérivée oblique. II. **82f:35069**
- Troianello, Giovanni M. Unilateral Dirichlet problems of the nonvariational type. **82b:35052**
- Winzell, Bengt A boundary value problem with an oblique derivative. **82j:35048**
- secondary classifications:
- Aleksidze, M. A. On a generalization of the Stokes theorem. (Russian) **(82b:31009)**
- Azzam, Ali First boundary value problem for elliptic equations on rectangular regions. (Arabic summary) **(82f:35030)**
- Bálint, Vojtech Solution of some second-order partial differential equations with a boundary condition. (Slovak) **(82c:35012)**
- Cranston, Michael (with Orey, Steven; Rösler, Uwe) Exterior Dirichlet problems and the asymptotic behavior of diffusions. **(82c:60123)**
- Džamalov, K. Generalized solutions of the Dirichlet problem in spaces with a mixed norm. (Russian) **(82c:35038)**
- Fenčenko, V. M. (with Hruslov, E. Ja.) Asymptotic behavior of the solutions of differential equations with strongly oscillating and degenerating coefficient matrix. (Russian. English summary) **(82f:35021)**
- Frank, L. S. (with van Groesen, E. W.) Singular perturbations of an elliptic operator with discontinuous nonlinearity. **(82f:35014)**
- Freeden, Willi (with Kersten, Heinrich) A constructive approximation theorem for the oblique derivative problem in potential theory. **(82j:35007)**
- Goličev, I. I. On a method for the approximate solution of optimal control problems. (Russian) **(82b:49043)**
- van Groesen, E. W. See Frank, L. S., **(82f:35014)**
- Hruslov, E. Ja. See Fenčenko, V. M., **(82f:35021)**
- Jiang, Li Shang See Zhang, Gong Qing, **(82b:35153)**
- Kersten, Heinrich See Freeden, Willi, **(82j:35007)**
- Kráľ, Josef ★Integral operators in potential theory. **(82b:31010)**
- Leikova, E. F. Asymptotic behavior of the solution of an elliptic equation with a small parameter in a domain with a piecewise smooth boundary. (Russian) **(82d:35020)**
- Müller, Claus Neue Verfahren zur Lösung der elliptischen Randwertprobleme der Mathematischen Physik. **(82a:65072)**
- Orey, Steven See Cranston, Michael; et al., **(82c:60123)**
- Osmolovskii, V. G. (with Rivkind, V. Ja.) A method of separation of domains for elliptic equations with discontinuous coefficients. (Russian) **(82d:35103)**
- Rivkind, V. Ja. See Osmolovskii, V. G., **(82d:35103)**
- Rösler, Uwe See Cranston, Michael; et al., **(82c:60123)**
- Rutkauskas, S. The Dirichlet problem for elliptic equations that are weakly degenerate at an interior point of the domain. (Russian. Lithuanian and German summaries) **(82d:35050)**
- Sarason, Leonard Second-order equations of fixed type in regions with corners. I. **(82j:35036)**
- Sazonov, A. Ju. The convergence of bilinear series consisting of eigenfunctions of singular elliptic operators. (Russian) **(82c:35060)**
- Zhang, Gong Qing (with Jiang, Li Shang) The free boundary problem of the stationary water cone. (Chinese. English summary) **(82b:35153)**
- 35J30 Higher-order equations, general
- Beşjes, J. G. Separately real analytic functions and linear partial differential operators with real analytic coefficients. **82m:35037**
- Canfora, Albino A fourth-order elliptic equation with bounded and measurable coefficients. (Italian) **82m:35038**
- Chaljub-Simon, Alice Solutions héliennes à poids de systèmes linéaires elliptiques sur \mathbb{R}^n . (English summary) **82j:35049**
- Kruglova, S. P. (with Lomonos, L. N.) Special Cauchy problem for a class of fourth-order elliptic equations. (Russian) **82b:35028**
- Lockhart, Robert B. Fredholm properties of a class of elliptic operators on noncompact manifolds. **82j:35050**
- Lomonos, L. N. See Kruglova, S. P., **82b:35028**
- López, Martin Estimates of solutions of higher-order elliptic equations in anisotropic Hölder norms and some of their applications. (Russian. English summary) **82m:35039**
- Maz'ja, V. G. (with Plamenevskii, B. A.) Pseudoanalyticity of the solutions of a perturbed polyharmonic equation in \mathbb{R}^n . (Russian) **82d:35043**
- Plamenevskii, B. A. See Maz'ja, V. G., **82d:35043**
- Qian, Min Extension of an elliptic differential operator and \dot{C} semigroups. (Chinese. English summary) **82f:35070**
- Winiarska, Teresa Continuity of solutions of elliptic equations of the high order with parameter. **82j:35051**
- secondary classifications:
- Aržanyh, I. S. Quasianalytic solutions of the biharmonic equation. (Russian) **(82g:31008)**
- Bove, Antonio (with Franchi, Bruno; Obrecht, Enrico) A boundary value problem for elliptic equations with polynomial coefficients in a half space. I. Pseudodifferential operators and function spaces. (Italian summary) **(82j:35144a)**
- Dobrotvor, I. G. See Gorbatčuk, V. I., **(82g:35006)**
- Evgorov, M. A. Some asymptotic problems for elliptic equations. (Russian) **(82c:35011)**
- Franchi, Bruno See Bove, Antonio; et al., **(82j:35144a)**
- Gorbatčuk, V. I. (with Dobrotvor, I. G.) Conditions for oscillation of solutions of a class of higher-order elliptic equations with constant coefficients. (Russian) **(82g:35006)**
- Kitamuro, Yuichi (with Kusano, Takasi) Oscillation criteria for semilinear metaharmonic equations in exterior domains. **(82b:35011)**
- Kusano, Takasi See Kitamuro, Yuichi, **(82b:35011)**
- Müller-Pfeiffer, Erich Ein Oszillationssatz für elliptische Differentialgleichungen höherer Ordnung. **(82f:35008)**
- Obrecht, Enrico See Bove, Antonio; et al., **(82j:35144a)**
- Sapondžjan, O. M. Bending of a thin plate under partial heating. (Russian. Armenian and English summaries) **(82c:73087)**
- Sprössig, Wolfgang Lösungsdarstellungen einer Klasse spezieller Operatorgleichungen. **(82a:35020)**

35J35 Higher-order equations, variational methods

- Tarba, L. A. On the properties of the solution of a higher-order elliptic equation in unbounded domains. (Russian. Georgian and English summaries) **82h:35029**

secondary classifications:

- Lizorkin, P. I. (with Nikol'skii, S. M.) An elliptic equation with degeneration. Variational method. (Russian) (**82f:35083**)
 Nikol'skii, S. M. See Lizorkin, P. I., (**82f:35083**)

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- Castellani Rizzonelli, Pieranita The Runge \mathcal{E}^2 approximation property and the generalized biharmonic problem. (Italian. English summary) **82f:35071**
 Gorbáčuk, V. I. Boundary value problems for elliptic differential equations. (Russian. English summary) **82h:35030**
 Górski, Jan On a certain boundary problem for the equation $(\Delta - c^2)u = 0$ in the half-plane. **82m:35040**
 On the Lauricella problem for the equation $(\Delta + c^2)u(x_1, x_2, x_3) = 0$ in the half-space $x_3 > 0$. **82m:35041**
 Ljabor, L. N. Normal solvability of some elliptic singular pseudodifferential equations. (Russian) **82k:35037**
 Maz'ja, V. G. (with Šapošnikova, T. O.) A coercive estimate for solutions of elliptic equations in spaces of multipliers. (Russian. English summary) **82c:35025**
 Nazarov, S. A. The index of an elliptic boundary value problem with a small parameter multiplying the highest derivative. (Russian. Lithuanian and English summaries) **82f:35072**
 Nunziante, Diana Dirichlet problem in a dihedron for a class of elliptic equations. (Italian. English summary) **82j:35052**
 Pašae, H. H. On the solution of a mixed problem from oscillation theory. (Russian. Azerbaijani and English summaries) **82m:35042**
 Pryde, A. J. Higher order elliptic boundary value problems in spaces with homogeneous norms. **82k:35038**
 Sändig, Anna-Margarete Über das Randverhalten schwacher Lösungen von elliptischen Differentialgleichungen höherer Ordnung in beschränkten Gebieten im \mathbb{R}^n . **82c:35026**
 Šapošnikova, T. O. See Maz'ja, V. G., **82c:35025**
 Schianchi, Rosanna Quasilinear problems in a half space. (Italian) **82h:35031**
 Wachnicka, Krystyna On the Green function for a certain three-harmonic problem. **82c:35034**

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- Ašurov, R. R. Conditions for localization of spectral decompositions corresponding to elliptic operators with constant coefficients. (Russian) (**82i:35138**)
 Athodzaev, M. A. An ill-posed problem for the biharmonic equation. (Russian) (**82h:35097**)
 Blum, H. (with Rannacher, R.) On the boundary value problem of the biharmonic operator on domains with angular corners. (**82a:35022**)
 Bove, Antonio (with Franchi, Bruno; Obrecht, Enrico) A boundary value problem for elliptic equations with polynomial coefficients in a half space. II. The boundary value problem. (Italian summary) (**82j:35144b**)
 Franchi, Bruno See Bove, Antonio; et al., (**82j:35144b**)
 Hmel'nickii, P. E. Some asymptotic properties of the spectrum of regular elliptic boundary value problems. (Russian) (**82a:35085**)
 Iliev, Iljia D. On the boundary problems in a half-space for a class of nonhyperbolic equations with constant strength. (**82g:35027**)
 Milewski, Jan (with Wachnicki, Eugeniusz) Solution d'un problème aux limites pour l'équation biharmonique. (**82a:31003**)
 Nakai, Mitsuru (with Sario, Leo) Duffin's function and Hadamard's conjecture. (**82d:31002**)
 Obrecht, Enrico See Bove, Antonio; et al., (**82j:35144b**)
 Rannacher, R. See Blum, H., (**82a:35022**)
 Saigardarov, Ju. Z. Asymptotic behavior of the solution of the first boundary value problem for a fourth-order elliptic equation with a small parameter multiplying the highest derivatives. (Russian) (**82d:35022**)
 Sändig, Anna-Margarete Das Maximum-Prinzip vom Miranda-Agmon-Typ für Lösungen der biharmonischen Gleichung in einem Rechteck. (**82d:31003**)
 Sario, Leo See Nakai, Mitsuru, (**82d:31002**)
 Ševčenko, V. I. On the spectrum of nonselfadjoint elliptic systems with singular coefficients. (Russian) (**82j:35111**)
 Shukla, P. L. Effect of Hall current on the hydromagnetic annular flow subjected to a nonsymmetric magnetic field. (**82h:76068**)
 Szalajko, Krystyna A certain boundary value problem for the equation $\Delta^2 u(x) = f(x)$ in an angle domain of the Euclidean n -space for $n \geq 5$. (**82f:35042**)
 Tačijan, G. M. Asymptotic behavior of the spectrum of elliptic differential equations with a weak polynomial degeneracy on the boundary of the domain. (Russian) (**82a:35087**)
 Tavhelidze, I. N. Solutions of polyharmonic equations with Dirichlet boundary conditions. (Russian) (**82c:31007**)
 Wachnicki, Eugeniusz See Milewski, Jan, (**82a:31003**)
 Wildenhain, Günther Über die Darstellbarkeit polyharmonischer Funktionen in der Kugel. (**82g:31009**)

35J45 Systems, general

- Buldyrev, V. S. (with Nomofilov, V. E.) Asymptotic solutions of an elliptic equation system on a Riemannian manifold concentrated in the vicinity of a phase trajectory. **82m:35043**
 Magnaradze, L. G. Construction of a general representation of the solutions of a class of plane elliptic systems of differential equations and of the matrices of their fundamental

solutions. (Russian. Georgian and English summaries) **82j:35053**

- Martimenko, Marija Fundamental solutions of elliptic systems in Riemannian space. (Ukrainian. Russian summary) **82a:35039**
 Nomofilov, V. E. See Buldyrev, V. S., **82m:35043**
 Oppizzi, Piro Elliptic systems of Agmon-Douglis-Nirenberg type with variable coefficients, and radiation conditions. (Italian. English summary) **82h:35053**
 Tursunov, M. A system of differential equations with singular coefficients. (Russian. Tajiki summary) **82i:35057**
 Vasil'eva, G. V. Multidimensional elliptic systems with small terms. (Russian) **82h:35054**

secondary classifications:

- Choquet-Bruhat, Yvonne (with Christodoulou, Demetrios) Elliptic systems in $H_{s,0}$ spaces on manifolds which are Euclidean at infinity. (**82c:58060**)
 Christodoulou, Demetrios See Choquet-Bruhat, Yvonne, (**82c:58060**)
 McCarthy, Patrick J. Ultragenralised complex analysis. (**82c:30072**)
 Mihailov, L. G. Reconstruction of a generalized analytic function from its real or imaginary part. (Russian. Tajiki summary) (**82k:30052**)
 Tutschke, Wolfgang Reduction of the problem of linear conjugation for first-order nonlinear elliptic systems in the plane to an analogous problem for holomorphic functions. (**82h:35009**)

35J50 Systems, variational methods

- Neittaanmäki, Pekka Dirichletsche und Neumannsche Randwertaufgaben in der statischen Elastizitätstheorie. **82m:35044**

secondary classifications:

- Galimov, K. Z. On the nonlinear theory of thin shells of Timolenko's type. (Russian) (**82d:73059**)
 Wright, Lynne C. A comparison theorem for higher order elliptic differential equations. (**82k:35007**)

35J55 Systems, boundary value problems

- Aksent'ev, L. A. (with Il'inskii, N. B.; Salimov, R. B.) On V. N. Monahov's book: *Boundary value problems with free boundaries for elliptic systems of equations* ["Nauka" Sibirsk. Otdel., Novosibirsk, 1977; MR 57 # 16979]. (Russian) **82m:35045**
 Babaev, S. A general boundary value problem for elliptic systems of differential equations on the plane. (Russian. Turkmen summary) **82i:35058**
 Clements, David L. ★ Boundary value problems governed by second order elliptic systems. **82k:35039**
 Frolov, P. A. Topological structure of normally solvable first boundary value problems on the plane. (Russian) **82h:35055**
 Il'inskii, N. B. See Aksent'ev, L. A.; et al., **82m:35045**
 Ivockina, N. M. A priori estimate of $\|u\|_{C^1(\bar{\Omega})}$ of convex solutions of the Dirichlet problem for the Monge-Ampère equation. (Russian) **82h:35056**
 Janušauskas, A. I. On some systems of second-order partial differential equations connected with multidimensional analogues of the Cauchy-Riemann system. (Russian. Lithuanian and English summaries) **82i:35059**
 Kvirkva, A. N. Riemann vector-matrix problem for an elliptic system of first-order differential equations in the case of a complex contour on a Riemann surface. (Russian) **82m:35046**
 Lorenzi, Alfredo Boundary value problems for first-order elliptic systems on domains with polygonal boundaries. I. (Italian summary) **82f:35073**
 Meliksetjan, E. P. The Dirichlet problem for elliptic systems of second-order differential equations in a class of summable functions. (Russian. Armenian and English summaries) **82f:35074**
 (Monahov, V. N.) See Aksent'ev, L. A.; et al., **82m:35045**
 Nazarov, S. A. Elliptic boundary value problems with periodic coefficients in a cylinder. (Russian) **82c:35035**
 Palekas, E. On the Dirichlet problem for multidimensional elliptic systems. (Russian) **82j:35054**
 Saak, E. M. A duality theorem for nonlocal boundary value problems. (Russian) **82i:35060**
 Sacerdote, F. Bounds for the solutions of elliptic problems of mixed type. (Italian. English summary) **82k:35040**
 Salimov, R. B. See Aksent'ev, L. A.; et al., **82m:35045**
 Schoenauer, Marc Quelques résultats de régularité pour un système elliptique avec conditions aux limites couplées. **82g:35035**
 Quelques résultats de régularité pour un système elliptique avec conditions aux limites couplées. (English summary) **82h:35057**
 Zigalko, Ju. P. Fundamental solutions in the theory of thin shells of revolution. (Russian) **82g:35036**

secondary classifications:

- Choquet-Bruhat, Yvonne Solutions globales des équations de Maxwell-Dirac-Klein-Gordon (masses nulles). (English summary) (**82f:81037**)
 Dolgova, I. M. (with Mel'nikov, Ju. A.) Construction of Green's functions and matrices for equations and systems of the elliptic type. (**82f:35034**)
 Mel'nikov, Ju. A. See Dolgova, I. M., (**82f:35034**)
 Schulze, Bert-Wolfgang Adjungierte elliptischer Randwert-Probleme und Anwendungen auf über- und unterbestimmte Systeme. (**82f:58084**)

35J60 Nonlinear equations and systems

- Agapova, T. M. Regularity near the boundary of solutions of a nonlinear Neumann problem in the case of two independent variables. (Russian) **82j:35055**
 Baranger, J. (with Dumont, T.) Projection methods for monotone elliptic partial differential equations. **82g:35037**

- Campanato, Sergio** (with Cannarsa, P.) Differentiability and partial Hölder continuity of the solutions of nonlinear elliptic systems of order $2m$ with quadratic growth. **82h:35041**
- Can Dyk Van** Infinite-order elliptic equations with arbitrary nonlinearities and corresponding function spaces. (Russian) **82a:35044**
- Cannarsa, P.** See Campanato, Sergio, **82h:35041**
- Ding, Xia Xi** See Luo, Pei Zhu; et al., **82j:35057**
- Dubinskii, Ju. A.** Some problems on the theory of Sobolev spaces of infinite order and nonlinear equations. (Russian) **82h:35032**
- Dumont, T.** See Baranger, J., **82j:35037**
- Esteban, Maria Jesús** Existence d'une infinité d'ondes solitaires pour des équations de champs non linéaires dans le plan. (English summary) **82i:35061**
- Evans, Lawrence C.** (with Lions, Pierre-Louis) Fully nonlinear second order elliptic equations with large zeroth order coefficient. (French summary) **82m:35047**
- Fang, Hui Zhong** See Luo, Pei Zhu; et al., **82j:35057**
- Gu, Yong Gen** See Luo, Pei Zhu; et al., **82j:35057**
- Gubaev, A. P.** The rate of growth of the solutions of quasilinear elliptic equations in an unbounded domain. (Russian) **82j:35038**
- Ivanov, A. V.** Two-sided and one-sided Liouville theorems for quasilinear elliptic equations of nondivergence type. (Russian) **82j:35056**
- Ivert, Per-Anders** Regularitätsuntersuchungen von Lösungen elliptischer Systeme von quasilinearen Differentialgleichungen zweiter Ordnung. (English summary) **82d:35045**
- Kawohl, Bernhard** On Liouville theorems, continuity and Hölder continuity of weak solutions to some quasilinear elliptic systems. **82j:35039**
- Lions, Pierre-Louis** Isolated singularities in semilinear problems. **82g:35040**
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- Luo, Pei Zhu** (with Gu, Yong Gen; Fang, Hui Zhong; Ding, Xia Xi) On the interior regularities of the solutions of quasilinear elliptic equations. **82j:35057**
- Maeda, Fumi-yuki** A convergence property for solutions of certain quasilinear elliptic equations. **82h:35058**
- Mario, Olli** Reflection principle for solutions of elliptic partial differential equations and quasiregular mappings. **82m:35048**
- Mignot, Fulbert** (with Murat, François; Puel, Jean-Pierre) Variation d'un point de retournement par rapport au domaine. (English summary) **82f:35075**
(with Puel, Jean-Pierre) Sur une classe de problèmes non linéaires avec non linéarité positive, croissante, convexe. **82g:35041**
- Murat, François** See Mignot, Fulbert; et al., **82f:35075**
- Pascali, Dan** On nonlinear divergence equations. **82c:35036**
- Payne, L. E.** (with Philippin, G. A.) On maximum principles for a class of nonlinear second-order elliptic equations. **82a:35040**
- Philippin, G. A.** See Payne, L. E., **82a:35040**
- Puel, Jean-Pierre** See Mignot, Fulbert; et al., **82f:35075** and **82g:35041**
- Rogozha, B. E.** First integrals of a quasilinear elliptic equation. (Russian) **82d:35046**
- Sant, Jean-Claude** Remarks on a nonlinear equation arising in population genetics. **82a:35041**
- Schulz, Friedmar** Innere Abschätzungen für Lösungen nichtlinearer elliptischer Differentialgleichungen zweiter Ordnung in n Variablen. **82m:35049**
- Skripnik, I. V.** Solvability of general nonlinear elliptic problems. (Russian) **82c:35062**
- Strauss, Walter A.** (with Vázquez, Luis) Existence of localized solutions for certain model field theories. **82m:35050**
- Struwe, Michael** A counterexample in elliptic regularity theory. **82j:35058**
- Trudinger, Neil S.** Harnack inequalities for nonuniformly elliptic divergence structure equations. **82m:35051**
- Vázquez, Juan Luis** (with Véron, Laurent) Removable singularities of some strongly nonlinear elliptic equations. **82h:35059**
- Vázquez, Luis** See Strauss, Walter A., **82m:35050**
- Véron, Laurent** Singularités éliminables d'équations elliptiques non linéaires. **82k:35042**
Singular solutions of some nonlinear elliptic equations. **82f:35076**
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- Walter, Wolfgang** Entire solutions of the differential equation $\Delta u = f(u)$. **82f:35077**
- secondary classifications:
- Altman, Mieczysław** Monotone ϵ -mappings. (Russian summary) **(82b:47067)**
- Amann, Herbert** Funktionalanalysis und nichtlineare Differentialgleichungen. **(82d:58020)**
- Bianchini, Ph.** Elliptic and hyperbolic nonlinear field equations. (See **82i:81004a**)
- Cherrier, Pascal** Étude d'une équation du type Monge-Ampère sur les variétés kählériennes compactes. (English summary) [Study of an equation of Monge-Ampère type on compact Kähler manifolds] **(82m:53069)**
- Gerhardt, Claus** Evolutionary surfaces of prescribed mean curvature. **(82m:53006)**
- Giusti, Enrico** A singular solution to the mean curvature equation. (Italian summary) **(82d:49039)**
- van Harten, Aart** Nonlinear singular perturbation problems: proofs of correctness of a formal approximation based on a contraction principle in a Banach space. **(82c:35007)**
- Howes, Fred A.** Some two parameter problems for singularly perturbed equations of elliptic type. **(82h:35015)**
- John, O.** See Nečas, Jindřich; et al., **(82c:35023)**
- Kaplanović, G. Ja.** Existence of a convex surface with given integral curvature in elliptic space and the solvability of Monge-Ampère equations. (Russian) **(82k:53063)**
- Kitamura, Yuichi** (with Kusano, Takasi) Oscillation criteria for semilinear metaharmonic equations in exterior domains. **(82h:35011)**
- Koz'mina, E. S.** (with Laptev, G. I.) Solvability conditions for nonlinear equilibrium equations for thin shells. (Russian) **(82a:73046)**
- Kusano, Takasi** (with Yoshida, Norio) Nonlinear oscillation criteria for singular elliptic differential operators. **(82c:35006)**
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- Laptev, G. I.** See Koz'mina, E. S., **(82a:73046)**
- Lions, Pierre-Louis** The Choquard equation and related questions. **(82b:35047)**
- Mumcaster, R. G.** Saint-Venant's problem in nonlinear elasticity: a study of cross sections. **(82e:73024)**
- Nečas, Jindřich** (with John, O.; Stará, J.) Counterexample to the regularity of weak solution of elliptic systems. **(82c:35023)**
- Ni, Wei Ming** Some minimax principles and their applications in nonlinear elliptic equations. **(82h:58024)**
- Redheffer, Raymond M.** (with Walter, Wolfgang) Invariant sets for systems of partial differential equations. II. First-order and elliptic equations. **(82h:35051)**
- Shapiro, Victor L.** Upper semicontinuity and the Monge-Ampère differential inequality. **(82f:35027)**
- Stará, J.** See Nečas, Jindřich; et al., **(82c:35023)**
- Talenti, Giorgio** Some estimates of solutions to Monge-Ampère type equations in dimension two. **(82h:53077)**
- Walter, Wolfgang** See Redheffer, Raymond M., **(82h:35051)**
- Yoshida, Norio** See Kusano, Takasi, **(82c:35006)**
- 35J65** Nonlinear boundary value problems for linear equations and systems; boundary value problems for nonlinear equations and systems
- Alexiades, Vasilios** (with Elcrat, Alan R.; Schaefer, Philip W.) Existence theorems for some nonlinear fourth order elliptic boundary value problems. **82c:35027**
- Amann, Herbert** Multiplicity results for nonlinear elliptic boundary value problems. **82h:35060**
A multiplicity theorem for a class of elliptic boundary value problems. (See **82i:35002**)
- Ambrosetti, Antonio** Global inversion theorems and applications to nonlinear problems. **82c:35037**
- Arakcheev, S. A.** Partial regularity of the solutions of the Dirichlet problem for quasilinear elliptic equations. (Russian) **82c:35038**
- Bahri, Abbas** (with Berestycki, Henri) A perturbation method in critical point theory and applications. **82j:35059**
- Basile, Nicola** (with Mininni, Michele) A multiplicity result for a class of nonlinear boundary value problems of the Ambrosetti-Prodi type. (Italian summary) **82j:35060**
- Berestycki, Henri** (with de Figueiredo, Djairo Guedes) Double resonance in semilinear elliptic problems. **82f:35078**
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- Bilopols'ka, Ja. I.** On the first boundary value problem for a system of quasilinear elliptic equations. (Russian) **82f:35079**
- Borodin, A. V.** Solution of nonlinear boundary value problems that depend on a parameter for systems of second-order partial differential equations. (Russian) **82d:35047**
- Brown, K. J.** (with Budin, H.) On the existence of positive solutions for a class of semilinear elliptic boundary value problems. **82k:35043**
- Budin, H.** See Brown, K. J., **82k:35043**
- Costa, D. G.** (with Gonçalves, José Valdo A.) Existence and multiplicity results for a class of nonlinear elliptic boundary value problems at resonance. **82k:35044**
- Dancer, Edward Norman** Corrigendum: "On the Dirichlet problem for weakly nonlinear elliptic partial differential equations" [Proc. Roy. Soc. Edinburgh Sect. A 76 (1976/77), no. 4, 283-300; MR 58 #17506]. **82i:35063**
- Drábek, Pavel** Solvability of the superlinear elliptic boundary value problem. **82i:35064**
Bounded nonlinear perturbations of second order linear elliptic problems. **82j:35061**
- Elcrat, Alan R.** See Alexiades, Vasilios; et al., **82c:35027**
- Fang, Ai Nong** See Wen, Guo Chen, **82k:35047**
- de Figueiredo, Djairo Guedes** See Berestycki, Henri, **82f:35078**
- Fitzpatrick, P. M.** (with Petryshyn, W. V.) Some applications of A -proper mappings. **82f:35080**
- Fortunato, Donato** Remarks on some nonlinear boundary value problems. (Italian summary) **82a:35042**
- Gidas, B.** (with Spruck, Joel) A priori bounds for positive solutions of nonlinear elliptic equations. **82h:35033**
- Gonçalves, José Valdo A.** On bounded nonlinear perturbations of an elliptic equation at resonance. **82h:35034**
See also Costa, D. G., **82k:35044**
- Gossez, Jean-Pierre** Orlicz-Sobolev spaces and nonlinear elliptic boundary value problems. **82h:35061**
- Hess, Peter** On multiple positive solutions of nonlinear elliptic eigenvalue problems. **82j:35062**
- Hofer, Helmut** Existence and multiplicity result for a class of second order elliptic equations. **82f:35081**
- Kalantarov, V.** Determination of solutions of the first boundary value problem for a system of von Kármán equations having an unbounded energy integral. (Russian) **82h:35062**
- Kodnár, Rudolf** Qualitative Eigenschaften eines Typs von Randproblemen. I. (Slovak and Russian summaries) **82k:35045a**
Qualitative Eigenschaften eines Typs von Randproblemen. II. (Slovak and Russian summaries) **82k:35045b**
Qualitative properties of a type of boundary value problems. III. (Russian. Slovak and German summaries) **82k:35045c**
- Massabò, I.** (with Nistri, P.; Pera, Maria Patrizia) A result on the existence of infinitely many solutions of a nonlinear elliptic boundary value problem at resonance. (Italian summary) **82a:35043**
- Mawhin, Jean** (with Ward, James R., Jr.) Nonresonance and existence for nonlinear elliptic boundary value problems. **82j:35063**
- Maz'ja, V. G.** (with Morozov, N. F.; Plamenevskii, B. A.) Nonlinear bending of a plate with a crack. (Russian) **82h:35063**
- Mininni, Michele** See Basile, Nicola, **82j:35060**
- Morozov, N. F.** See Maz'ja, V. G.; et al., **82h:35063**
- Nappi, Luigi** (with Tranchesi, Susanna) On the nonlinear Dirichlet problem in a plane angle. (Italian. English summary) **82g:35042**
- Nistri, P.** See Massabò, I.; et al., **82a:35043**

- Noussair, Ezzat S. On semilinear elliptic boundary value problems in unbounded domains. **82a:35046**
- Palmeri, Giuliana On nonlinear elliptic problems with "rapidly" or "slowly" increasing coefficients. (Italian. English summary) **82i:35065**
- Pascali, Dan Elliptic variational problems on unbounded domains. (Romanian. English summary) **82h:35035**
- Payne, L. E. Bounds for solutions of a class of quasilinear elliptic boundary value problems in terms of the torsion function. **82j:35064**
- Pera, Maria Patrizia See Massabò, I.; et al., **82a:35043**
- Petryshyn, W. V. See Fitzpatrick, P. M., **82i:35080**
- Plamenevskii, B. A. See Maz'ja, V. G.; et al., **82b:35063**
- Pohožaev, S. I. Equations of the type $\Delta u = f(x, u, Du)$. (Russian) **82i:35066**
- Ramanujam, N. (with Srivastava, U. N.) Singular perturbation problems for systems of partial differential equations of elliptic type. **82a:35044**
- Ramaswamy, Mythili On a nonlinear elliptic equation with periodic coefficients. **82j:35065**
- Safonov, M. V. On the Dirichlet problem for Bellman's equation in a plane region. (Russian) **82a:35045**
- Savčenko, Ju. B. On the solvability of the Dirichlet problem for a quasilinear elliptic equation. (Russian. Lithuanian and English summaries) **82i:35067**
- Schaefer, Philip W. See Alexiades, Vasilios; et al., **82c:35027**
- Schianchi, Rosanna Disymmetric spaces with weight and applications to nonlinear quasielliptic problems. (Italian) **82d:35048**
- Seidman, Thomas I. The asymptotic growth of solutions of $-\Delta u = \lambda f(u)$ for large λ . **82j:35066**
- Shibutani, Norimasa Approximation to the bifurcation solution locally minimizing a potential. **82h:35036**
- Siegel, David Height estimates for capillary surfaces. **82h:35037**
- Spruck, Joel See Gidas, B., **82h:35033**
- Srivastava, U. N. See Ramanujam, N., **82a:35044**
- Struwe, Michael Infinitely many solutions of superlinear boundary value problems with rotational symmetry. **82j:35067**
- Three nontrivial solutions of anticonvex boundary value problems for the pseudo-Laplace operator. **82i:35068**
- Sun, He Sheng On the problems of the infinitesimal deformation of the surfaces of revolution with mixed curvature. (Chinese. English summary) **82h:35038**
- Szilágyi, P. Boundary value problems for a nonlinear elliptic equation. **82c:35028**
- de Thélin, François Régularité de la solution d'une équation fortement (ou faiblement) non linéaire dans \mathbb{R}^n . (English summary) **82i:35069**
- Thews, Klaus A reduction method for some nonlinear Dirichlet problems. **82a:35046**
- Tranchesi, Susanna See Nappi, Luigi, **82g:35042**
- Ts'ai, Lung I Periodic solutions of nonlinear elliptic equations. **82m:35052**
- Turkington, Bruce Height estimates for exterior problems of capillarity type. **82i:35070**
- Tutschke, Wolfgang The Riemann-Hilbert problem for nonlinear systems of first-order equations of elliptic type. (Russian) **82j:35068**
- Ward, James R., Jr. See Mawhin, Jean, **82j:35063**
- Webb, J. R. L. Boundary value problems for strongly nonlinear elliptic equations. **82a:35039**
- Wen, Guo Chen (with Fang, Ai Nong) The complex form and some boundary value problems for nonlinear elliptic systems of second order. (Chinese. English summary) **82h:35047**
- Wiegner, Michael The $C^{1,1}$ -character of solutions of second order elliptic equations with gradient constraint. **82h:35039**
- Wildenauer, Peter Existence of a minimal solution and a maximal solution of nonlinear elliptic boundary value problems. **82h:35040**
- secondary classifications:
- Abdulaev, R. N. A mixed boundary value problem for the minimal surface equation in nonconvex domains. (Russian) **(82i:49038)**
- Baddour, R. E. See Hunt, J. N., **(82a:76011)**
- Bates, Peter W. Solutions of nonlinear elliptic systems with meshed spectra. **(82a:47056)**
- Berger, M. S. (with Church, P. T.) Complete integrability and perturbation of a nonlinear Dirichlet problem. II. **(82g:58086)**
- Borisova, V. I. On a numerical solution of a nonlinear problem of the hydraulic flow of filtration. (Russian. Tajiki summary) **(82i:65065)**
- Brown, K. J. (with Ibrahim, M. M. A.; Shivaji, R.) S-shaped bifurcation curves. **(82k:35007)**
- Church, P. T. See Berger, M. S., **(82g:58086)**
- Fage, D. M. Approximate solution of a nonlinear problem with constraint for a two-dimensional elliptic equation. (Russian) **(82c:65082)**
- Fomenko, V. T. Continuous bendings of convex surfaces with boundary conditions. (Russian) **(82m:53061)**
- Hetzer, Georg A continuation theorem and the variational solvability of quasilinear elliptic boundary value problems at resonance. **(82e:47079)**
- Howes, Fred A. Some singularly perturbed nonlinear boundary value problems of elliptic type. **(82c:35008)**
- Hunt, J. N. (with Baddour, R. E.) Nonlinear standing waves bounded by cylinders. **(82a:76011)**
- Ibrahim, M. M. A. See Brown, K. J.; et al., **(82k:35007)**
- Ichida, Ryosuke Corrections to: "Dirichlet problem for minimal surface equations in a Riemannian manifold. I" [Yokohama Math. J. 27 (1979), no. 2, 127-139; MR 81a:53006]. **(82g:53059)**
- Ivanov, A. V. A general boundary value problem for quasilinear (A, \vec{b}) -elliptic equations. (Russian) **(82h:35066)**
- Janovský, Vladimír (with Procházka, Petr) Contact problem of two elastic bodies. I, II, III. (Russian and Slovak summaries) **(82h:73053)**
- Jonsson, Thordur Merons at finite temperature. **(82f:81047)**
- Kawohl, Bernhard On nonlinear mixed boundary value problems for second order elliptic differential equations on domains with corners. **(82c:35022)**
- Keady, Grant (with Norbury, John) A semilinear elliptic eigenvalue problem. I. **(82m:58018a)**
- (with Norbury, John) A semilinear elliptic eigenvalue problem. II. The plasma problem. **(82m:58018b)**
- Kelley, Walter G. The Dirichlet problem for singularly perturbed quasilinear elliptic equations. **(82i:35016)**
- Kull, Hans Über eine Klasse von nichtlinearen Randwertproblemen: Änderung des kritischen Parameters bei Symmetrisierungen. (English summary) **(82d:34022)**
- Macaev, V. I. See Markus, A. S., **(82c:47018)**
- Markus, A. S. (with Macaev, V. I.) Operators generated by sesquilinear forms and their spectral asymptotics. (Russian) **(82i:47018)**
- Minahin, V. V. The Liouville theorem and the Harnack inequality for the Beltrami equation on an arbitrary manifold. (Russian) **(82h:53056)**
- Norbury, John See Keady, Grant, **(82m:58018a)** and **(82m:58018b)**
- Perko, L. M. A class of superquadratic boundary value problems of capillary type. **(82c:34021)**
- Procházka, Petr See Janovský, Vladimír, **(82h:73053)**
- Repnikova, N. M. A boundary value problem with random perturbations. (Russian) **(82h:60071)**
- Senašov, S. I. Invariant solutions of a three-dimensional problem of ideal plasticity. (Russian) **(82c:73040)**
- Shivaji, R. See Brown, K. J.; et al., **(82h:35007)**
- Stakgold, Ivar Estimates for some free boundary problems. **(82i:35189)**
- Trudinger, Neil S. On the first eigenvalue of nonuniformly elliptic boundary value problems. **(82h:35114)**
- Zraževs'ka, G. M. Rigidity of certain classes of surfaces with respect to special continuous bendings. (Ukrainian. English and Russian summaries) **(82m:53065)**
- 35J67 Boundary values of solutions
- Evans, Lawrence C. (with Jensen, Robert) A boundary gradient estimate for harmonic functions and applications. **82j:35069**
- Ivočina, N. M. The integral method of barrier functions and the Dirichlet problem for equations with operators of the Monge-Ampère type. (Russian) **82d:35049**
- Jensen, Robert See Evans, Lawrence C., **82j:35069**
- Kapanadze, D. V. The boundary values of nonnegative solutions of elliptic equations. (Russian. Georgian and English summaries) **82i:35071**
- Kerimov, T. M. A criterion for the regularity of a boundary point relative to a mixed boundary value problem for a second-order elliptic equation. (Russian. Azerbaijani and English summaries) **82m:35053**
- secondary classifications:
- González, Luis (with Keller, Eckart; Wildenhain, Günther) Über das Randverhalten des Poisson-Integrals der polyharmonischen Gleichung. **(82g:31007)**
- Keller, Eckart See González, Luis; et al., **(82g:31007)**
- Kurylev, Ja. V. Boundary conditions on a curve for a three-dimensional Laplace operator. (Russian. English summary) **(82c:35023)**
- Wildenhain, Günther See González, Luis; et al., **(82g:31007)**
- 35J70 Equations and systems of degenerate type
- Amano, Kazuo Maximum principles for degenerate elliptic-parabolic equations with Venttsel's boundary condition. **82c:35029**
- Arhipov, V. P. Weak solutions of degenerate differential equations. (Russian) **82j:35070**
- Baev, A. D. See Gluško, V. P., **82i:35073**
- Bogatov, M. I. Second-order elliptic equations that degenerate on two hypersurfaces forming a nonzero angle. (Russian) **82i:35072**
- Čobanov, Georgi I. On the Dirichlet problem for a class of second-order quasilinear equations with nonnegative characteristic form. (Bulgarian. English summary) **82h:35064**
- Elischer, Johannes (with Lorenz, Michael) Über den Operator $\sum_{|\alpha| \leq m} c_{\alpha\beta} x^\alpha \partial^\beta$. **82i:35082**
- ★Über entartete Randwertprobleme für elliptische Differentialoperatoren zweiter Ordnung in der Ebene. (German) [On degenerate boundary value problems for second-order elliptic differential operators in the plane] **82h:35041**
- Gluško, V. P. (with Baev, A. D.) Well-posed boundary value problems for certain classes of high-order degenerate elliptic equations. (Russian) **82i:35073**
- Gončarenko, V. M. (with Malovičko, V. O.) The first boundary value problem for second-order equations with nonnegative characteristic form. (Ukrainian. English and Russian summaries) **82j:35071**
- He Kan Čer Analyticity of solutions of a class of degenerate differential equations. (Russian) **82h:35065**
- Ikebe, Nobunori (with Ohara, Yasuhiro) Degenerate quasilinear elliptic equations. **82g:35043**
- Infantino, Roberto (with Troisi, Mario) Degenerate elliptic operators in domains of \mathbb{R}^n . (Italian. English summary) **82j:35072**
- Ivanov, A. V. The first and second boundary value problems for (A, \vec{b}) -elliptic equations. (Russian. English summary) **82i:35074**
- A general boundary value problem for quasilinear (A, \vec{b}) -elliptic equations. (Russian) **82h:35066**
- Janičanskas, A. I. On the analytic theory of degenerate elliptic equations. (Russian) **82h:35048**
- Application of the Poincaré method in the analytic theory of partial differential equations. (Russian. Lithuanian and English summaries) **82m:35054**
- Karol', A. I. On the $\bar{\partial}$ -function of a degenerate elliptic Dirichlet boundary value problem. (Russian) **82m:35055**
- Kerimov, T. M. On a degenerate mixed problem for a second-order elliptic equation. (Russian. English summary) **82m:35056**
- Kvedaras, Bromius Solution of the Dirichlet problem for a degenerate elliptic equation. (Russian) **82i:35075**

- Lewis, John L.** Smoothness of certain degenerate elliptic equations. **82a:35047**
- Lizorkin, P. I.** (with Nikol'skii, S. M.) An elliptic equation with degeneration. Variational method. (Russian) **82j:35083**
- Ljajev, L. N.** On a class of singular elliptic boundary value problems in a quarter space. (Russian) (See **82m:34004**)
- Lorenz, Michael** See **Eltschner, Johannes**, **82f:35082**
- Malovichko, V. O.** Boundary value problems for second-order equations with nonnegative characteristic form. (Russian) **82c:35030**
- Solvability of a boundary value problem for a differential equation with a nonnegative characteristic form with boundary conditions of the first and third kind. (Russian) **82j:35073**
- See also **Gontarenko, V. M.**, **82j:35071**
- Mandras, Franco** On a class of degenerate elliptic equations of nonvariational type in two variables. (Italian. English summary) **82m:35057**
- Mirzayev, P. Z.** Some properties of generalized solutions of second-order degenerate quasilinear elliptic equations. (Russian. Armenian summary) **82i:35076**
- On the solvability of the Dirichlet problem for a class of degenerate quasilinear equations of elliptic type. (Russian) **82i:35077**
- Moss, William F.** Fundamental solutions of degenerate or singular elliptic equations. **82c:35031**
- Mozolevskii, I. E.** The conjugation problem for degenerate elliptic and quasielliptic equations. (Russian. English summary) **82j:35074**
- Muratbekov, M. B.** Smoothness of solutions of a class of nonuniformly degenerate elliptic equations. (Russian) **82m:35058**
- Nikol'skii, S. M.** See **Lizorkin, P. I.**, **82f:35083**
- Ohara, Yasuhiro** See **Ikebe, Nobumori**, **82g:35043**
- Porru, Giovanni** A regularity result for the solutions of degenerate second-order elliptic equations of nonvariational type. (Italian. English summary) **82k:35049**
- Roitberg, Ja. A.** (with Šefel', Z. G.) On general elliptic problems with strong degeneration. (Russian) **82h:35067**
- Romaskevich, L. P.** The first boundary value problem in classes of unbounded solutions for equations with nonnegative characteristic form. (Russian. English summary) **82m:35059**
- Rutkauskas, S.** The Dirichlet problem for elliptic equations that are weakly degenerate at an interior point of the domain. (Russian. Lithuanian and German summaries) **82d:35050**
- Šefel', Z. G.** See **Roitberg, Ja. A.**, **82h:35067**
- Sergienko, L. S.** On the Dirichlet problem for degenerate elliptic equations. (Russian) **82c:35048**
- Timmermans, C. A.** A new type of approximation operators in $L^2(\Omega)$, $\Omega \subset \mathbb{R}^n$. **82m:35060**
- Troisi, Mario** See **Infantino, Roberto**, **82j:35072**
- Utepbergenov, M.** On the theory of pseudoregular singularities of degenerate equations. (Russian) **82m:35061**
- Yamada, Haruki** On the first boundary value problems for some degenerate second order elliptic differential equations. **82c:35040**
- secondary classifications:
- Amano, Kazuo** Hypocoercivity of a class of degenerate elliptic-parabolic operators. (82h:35020)
- Bubnov, B. A.** Completeness of a system of eigenfunctions of the first boundary value problem for a class of elliptic equations. (Russian) (82a:35081)
- Demichele, Cataldo** (with Matteo, Alba) On the removable singularities of the weak solutions of strongly quasielliptic equations. (Italian. English summary) (82g:35025)
- Johnstone, Iain** ★A probabilistic study of linear elliptic-parabolic equations of second order. (82i:60114)
- Kuiper, Hendrik J.** Invariant sets for nonlinear elliptic and parabolic systems. (82h:35089)
- Langlais, Michel** A degenerating elliptic problem with unilateral constraints. (82h:49012)
- Lassoued, L.** Espaces de Dirichlet et axiomatique de Brelot. (82d:31012)
- Matsumoto, Waichirō** Une remarque sur l'unicité du prolongement des solutions pour les systèmes mixtes de type parabolique et de type elliptique dégénéré. (English summary) (82c:35044)
- Matteo, Alba** See **Demichele, Cataldo**, (82g:35025)
- Nardini, Franco** On a class of singular quasielliptic differential operators. (Italian) (82c:46041)
- Pillat, Ulf** (with Schulze, Bert-Wolfgang) Some classes of nonelliptic boundary value problems for pseudodifferential operators. II. Overdetermined and underdetermined systems. (82k:58090)
- Schulze, Bert-Wolfgang** See **Pillat, Ulf**, (82k:58090)
- Shiga, Tokuzo** Diffusion processes in population genetics. (82i:60129)
- Stoica, Lucretiu** On the hyperharmonic functions associated with a degenerated elliptic operator. (82h:31003)
- Usanetsvili, M. A.** A mixed boundary value problem for the equation $y'' u_{xx} + u_{yy} = 0$. (Russian. Georgian and English summaries) (82h:35077)
- 35J85** Unilateral problems; variational inequalities [See also 35R35, 49A29.]
- Alihanova, R. I.** On a class of elliptic variational inequalities. (Russian. Azerbaijani and English summaries) **82j:35075**
- Bandie, Catherine** (with Marcus, Moshe) Sur une classe de problèmes apparaissant en physique des plasmas. (English summary) [A class of problems appearing in plasma physics] **82m:35062**
- Caffarelli, Luis A.** A remark on the Hausdorff measure of a free boundary, and the convergence of coincidence sets. (Italian summary) **82i:35078**
- Dervieux, A.** (with Kawarada, Hideo) Free boundary problems for the Laplace equation: a priori estimates, existence theorems, asymptotic behaviours. **82k:35050**
- Hanouz, Bernard** See **Platone Garroni, Maria Giovanna**, et al., **82m:35063**
- Haslinger, Jaroslav** (with Lovisek, Jan) Mixed variational formulation of unilateral problems. (See **82k:49004**)
- Jiang, Li Shang** See **Zhang, Gong Qing**, **82g:35044**
- Joly, Jean-Luc** See **Platone Garroni, Maria Giovanna**, et al., **82m:35063**
- Kawarada, Hideo** See **Dervieux, A.**, **82k:35050**
- Lions, Pierre-Louis** Une inégalité pour les opérateurs elliptiques du second ordre. (English summary) [An inequality for second-order elliptic operators] **82k:35051**
- Lovisek, Jan** See **Haslinger, Jaroslav**, (See **82k:49004**)
- Marcus, Moshe** See **Bandie, Catherine**, **82m:35062**
- Medeiros, L. A.** Initiations to elliptic variational inequalities. (Portuguese) **82f:35084**
- Platone Garroni, Maria Giovanna** (with Hanouz, Bernard; Joly, Jean-Luc) Régularité pour la solution d'un système I.Q.V. (Italian summary) **82m:35063**
- Spruck, Joel** Regularity in elliptic free boundary problems. **82k:35052**
- Zhang, Gong Qing** (with Jiang, Li Shang) Free boundary problems of the steady water cone in the well of a petroleum reservoir. (Chinese) **82g:35044**
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- Barbu, Viorel** Necessary conditions for nonconvex distributed control problems governed by elliptic variational inequalities. (82m:49026)
- Bensoussan, Alain** (with Lions, Jacques-Louis) A remark on an equation of dynamic programming. (82k:49014)
- Biroli, Marco** (with Marchi, S.; Norando, T.) Homogenization estimates for quasivariational inequalities. (Italian summary) (82i:49005)
- Charrier, P.** Continuité de la solution d'un problème d'obstacle et application. (82k:49015)
- Kawarada, Hideo** See **Natori, Makoto**, (82h:49023)
- Kawohl, Bernhard** On a mixed Signorini problem. (82i:49007)
- Kuber, N. A.** Variational method of investigation of steady-state two-dimensional subcritical gas flows. (Russian) (82m:76043)
- Lions, Jacques-Louis** See **Bensoussan, Alain**, (82k:49014)
- Lovisek, Jan** Duality in the obstacle and unilateral problem for the biharmonic operator. (Czech summary) (82k:49017)
- Marchi, S.** See **Biroli, Marco**, et al., (82i:49005)
- Natori, Makoto** (with Kawarada, Hideo) An application of the integrated penalty method to free boundary problems of Laplace equation. (82h:49023)
- Norando, T.** See **Biroli, Marco**, et al., (82i:49005)
- Platone Garroni, Maria Giovanna** (with Vivaldi, Maria Agostina) Bilateral inequalities and implicit unilateral systems of the nonvariational type. (82f:49006)
- Vivaldi, Maria Agostina** See **Platone Garroni, Maria Giovanna**, (82f:49006)
- Williams, Graham H.** Nonlinear nonhomogeneous elliptic variational inequalities with a nonconstant gradient constraint. (82f:49008)
- 35J99** None of the above, but in this section
- Bliev, N. K.** Homeomorphisms of the Beltrami equation in fractional spaces. (Russian) **82a:35049**
- Krendel'ev, S. F.** Integral representations for first-order elliptic systems. (Russian) **82j:35076**
- Mozolevskii, I. E.** The problem of conjugation for quasielliptic equations. (Russian. English summary) **82i:35079**
- Picard, Rainer** Ein Kommentar zur Linienmethode bei der Maxwellschen Anfangsrandwertaufgabe. **82h:35042**
- Popova, Anna A.** Application of the method of steepest descent to the solution of asymmetric operator equations. (Russian) **82c:35041**
- Vrinceanu, G. G.** Equations de Laplace et matrices de Dirac. (English summary) **82i:35080**
- secondary classifications:
- Akahi, Takao** On the existence of a versal family of deformations of solutions of a differential equation. (82f:32032)
- Asada, Akira** Erratum to the paper: "Trace of the fundamental solution of $\Delta + \epsilon^k D$ and spectral difference" [J. Fac. Sci. Shinshu Univ. 14 (1979), no. 2, 47-85; MR 81j:58076]. (82c:58096)
- Babič, V. M.** (with Grigor'eva, N. S.) Space-time method of calculation of waves in a slightly inhomogeneous layered medium. (Russian. English summary) (82j:73020)
- Balasova, G. S.** Behavior of the solution of some boundary value problems when the order of the equation increases indefinitely. (Russian) (82g:34012)
- Battle, Guy A.** Generalized analytic functions and the two-dimensional Euclidean Dirac operator. (82k:81047)
- Biollay, Yves** First boundary value problem in elasticity: bounds for the displacements and Saint-Venant's principle. (French summary) (82c:73016)
- Borrelli, Alessandra** (with Patria, Maria Cristina) Some results in the dynamics of inextensible elastic solids. (Italian. English summary) (82f:73014)
- Bruno, Teresa** Quasielliptic systems and Gevrey classes. (Italian) (82c:35013)
- Chandrasekhar, D. S.** Wave propagation in a thermoelastic half-space. (82c:73079)
- Choquet-Bruhat, Yvonne** (with Christodoulou, Demetrios) Systèmes elliptiques sur une variété euclidienne à l'infini. (English summary) (82h:58046)
- Christodoulou, Demetrios** See **Choquet-Bruhat, Yvonne**, (82h:58046)
- Destuynder, Philippe** (with Djaoa, Mohamed) Sur une interprétation mathématique de l'intégrale de Rice en théorie de la rupture fragile. (English summary) (82c:73070)
- Djaoa, Mohamed** See **Destuynder, Philippe**, (82c:73070)
- Dmitrieva, Z. N.** On the theory of nonlinear oscillations of thin rectangular plates. (Russian) (82c:73050)
- Eells, James** (with Lemaire, L.) Deformations of metrics and associated harmonic maps. (82c:58023)
- Eremín, Ju. A.** (with Zaharov, E. V.; Nesmejanova, N. I.) A method of fundamental solutions in diffraction problems of electromagnetic waves on bodies of revolution. (Russian) (82j:78006)
- Ezin, Jean-Pierre** Sur l'estimée de N. S. Trudinger pour le cas-limite des inégalités de Sobolev. (82c:46047)

- Garofalo, Nicola On a theorem of compact imbedding between Volevič-Panejah spaces. (Italian) (82b:46039)
- Grigor'eva, N. S. See Babič, V. M., (82j:73020)
- Gueugnon, Michel Perturbations singulières et noyaux de Poisson. (82c:35006)
- Hamilton, Richard S. Deformation of complex structures on manifolds with boundary. II. Families of noncoercive boundary value problems. (82c:32035)
- Himčenko, B. N. See Kamynin, L. I., (82c:35014)
- Horgan, C. O. (with Knowles, James K.) The effect of nonlinearity on a principle of Saint-Venant type. (82h:73041)
- Huet, Denise Proper approximation of a normed space and singular perturbations. (82c:35016)
- Kamynin, L. I. (with Himčenko, B. N.) An isotropic strict extremum principle. (Russian. English summary) (82c:35014)
- Katase, Kiyoshi Eta function on S^3 . (82g:58080)
- Kifer, Yuri Stochastic stability of the topological pressure. (82c:58050)
- Knowles, James K. See Horgan, C. O., (82h:73041)
- Lemaire, L. See Eells, James, (82a:58023)
- Lenoir, Marc (with Martin, Daniel Jean) An application of the principle of limiting absorption to the motions of floating bodies. (82d:76019)
- Li, Bing Ren Mathematical foundations of electromagnetic diffraction theory. (Chinese) (82j:78009)
- Löhmus, J. See Sorgsepp, L., (82m:30050)
- Martin, Daniel Jean See Lenoir, Marc, (82d:76019)
- Martynenko, M. D. (with Šipka, I. G.; Svirskii, E. A.) General representation of the solutions of static equations of the moment theory of elasticity. (Russian. English summary) (82c:73008)
- Menzala, Gustavo Perla On a Hartree type equation: existence of regular solutions. (82a:81056)
- Nesmejanova, N. I. See Eremin, Ju. A.; et al., (82j:78006)
- Novokosenov, V. Ju. Asymptotic behavior at infinity of the solution of an elliptic pseudodifferential equation in a half-space. (Russian) (82f:35195)
- Asymptotic behavior with respect to the small parameter of a solution of an elliptic pseudodifferential equation in half space. (Russian) (82i:35174)
- Nye, V. A. Application to magnetohydrodynamic duct flows of a singular elliptic problem associated with a rectangle. (82c:76112)
- Orlujk, E. I. Functional equations of an axially symmetric problem of the theory of elasticity for a spherical lune and their solutions. (Russian. English summary) (82c:73029)
- Özok, Afet K. On related vector fields of capillary surfaces. (82g:53010)
- Paquet, Luc Semi-groupes holomorphes en norme du sup. (82a:47040)
- Patria, Maria Cristina See Borrelli, Alessandra, (82f:73014)
- Peetre, Jaak On Hadamard's variational formula. (82f:58037)
- Proskura, A. V. Asymptotically exact equations for the bending of thin plates. (Russian) (82c:73048)
- Rosmond, Thomas E. Elliptic equations in meteorology. (82c:35074)
- Sabbi, Sandra On a reciprocity theorem in electromagnetism. (Italian) (82b:78006)
- Samolënko, V. G. Second-order elliptic operators with an infinite number of variables. (Russian) (82c:35078)
- Sharma, Bhagirath Lal Atiyah-Singer index theorem. (82g:58081)
- Shirali, Satish Inverse of the Laplacian on a plane domain with corners. (82k:31003)
- Sibner, L. M. (with Sibner, R. J.) A sub-elliptic estimate for a class of invariantly defined elliptic systems. (82j:58115)
- Sibner, R. J. See Sibner, L. M., (82j:58115)
- Šilko, V. P. Elliptic equations and boundary control. (Russian) (82a:93076)
- Šipka, I. G. See Martynenko, M. D.; et al., (82c:73008)
- Sorgsepp, L. (with Löhmus, J.) Binary and ternary sedations. (82m:30050)
- Stewart, H. Bruce Generation of analytic semigroups by strongly elliptic operators under general boundary conditions. (82h:35048)
- Svirskii, E. A. See Martynenko, M. D.; et al., (82c:73008)
- Tandit, B. V. Traces of functions of the class W_p^r . (Russian) (82g:46070)
- Zaharov, E. V. See Eremin, Ju. A.; et al., (82j:78006)

35Kxx Parabolic equations and systems [See also 58G11.]

35K05 Heat equation

- Aronson, Donald G. Widder's inversion theorem and the initial distribution problems. (82i:35081)
- Boyd, J. N. (with Raychowdhury, P. N.) Group theoretical aspects of solutions of a two-dimensional steady-state heat equation. (82m:35064)
- Daniiljuk, I. I. On a multidimensional nonstationary Stefan problem in domains with a nonsmooth boundary. (Russian. English summary) (82i:35082)
- A mixed problem for a quasilinear heat conduction equation with piecewise discontinuous coefficients. (Russian. English summary) (82m:35065)
- Denisov, V. N. On a necessary condition for uniform stabilization of the solution to the Cauchy problem for the heat equation. (Russian) (82c:35032)
- Diaz, R. A Runge theorem for solutions of the heat equation. (82a:35050)
- Dont, Miroslav On heat potentials. (See 82g:31001)
- On the continuity of heat potentials. (Czech summary) (82h:35043)
- Ewer, J. P. G. The conduction of heat in bodies with varying specific heat capacity. (82a:35051)
- Fasano, Antonio See Rubinstein, Lev; et al., (82f:35087)
- Gavalas, G. R. (with Yortsos, Y. C.) Short-time asymptotic solutions of the heat conduction equation with spatially varying coefficients. (82k:35053)
- Grimaldi Piro, A. (with Ragnedda, F.) On a Cauchy problem for the bicaloric operator with initial data in subspaces of BMO. (Italian. English summary) (82m:35066)
- Gu, Lian Kun The asymptotic behavior of the solution of the multiphase Stefan problem. (Chinese) (82f:35085)
- Harin, S. N. See Kim, E. I.; et al., (82i:35083)
- Jochum, Peter Differentiable dependence upon the data in a one-phase Stefan problem. (82c:35054)

- Kim, E. I. (with Krasnov, Ja. A.; Harin, S. N.) A class of nonlinear problems of heat conduction in the theory of electrical contacts. (Russian) (82i:35083)
- Kralčev, B. N. Estimates of control functions in an inverse problem for the heat equation. (Bulgarian. Russian and English summaries) (82c:35042)
- Krasnov, Ja. A. See Kim, E. I.; et al., (82i:35083)
- Lesaint, Pierre Solving the heat equation on noncylindrical domains. (See 82g:80001)
- Lighthourne, James H., III (with Rankin, Samuel M., III) Global existence for a delay differential equation. (82f:35086)
- Neustadter, S. F. The time dependent Poisson queue and moving boundary problems for the heat and wave equation. (82k:35055)
- Primicerio, Mario See Rubinstein, Lev; et al., (82f:35087)
- Prudnikov, A. P. Watson operators and their application to the solution of certain problems of the theory of heat conduction. (Russian) (82a:35052)
- Ragnedda, F. See Grimaldi Piro, A., (82m:35066)
- Rankin, Samuel M., III See Lighthourne, James H., III, (82f:35086)
- Raychowdhury, P. N. See Boyd, J. N., (82m:35064)
- Rubinstein, Lev (with Fasano, Antonio; Primicerio, Mario) Remarks on the analyticity of the free boundary for the one-dimensional Stefan problem. (82f:35087)
- Salei, S. V. On the rate of convergence of a free boundary to the limit value in a Stefan problem. (Russian. English summary) (82m:35067)
- Sopolor, N. N. Some boundary value problems for the heat equation. (Russian) (82f:35088)
- Wolska-Bochenek, Janina On some Stefan like problem. (See 82k:49004)
- Yortsos, Y. C. See Gavalas, G. R., (82c:35053)

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- Atamanov, È. R. Uniqueness and estimate of the stability of the solution of a problem for a heat equation with moving transducer. (Russian) (82b:35149)
- Azamator, S. Ž. On a boundary value problem for the heat equation with shifted argument. (Russian. Kazakh summary) (82m:35138)
- Barański, Feliks On a certain limit problem for the heat conduction equation and for triangular plate. (82i:35034)
- On a certain limit problem for the heat conduction equation and any angular time spatial domain. (82i:35035)
- Capinski, Marek Statistical solutions of the heat equation. (82i:35171)
- Cheeger, Jeff (with Yau, Shing Tung) A lower bound for the heat kernel. (82i:58065)
- Cross, Mark See Voller, V. R.; et al., (See 82g:80001)
- Cygan, Jacek Heat kernels for class 2 nilpotent groups. (82b:22016)
- Damlamian, Alain A variational formulation for the Stefan problem; existence of weak solutions. (82c:35081)
- How to homogenize a nonlinear diffusion equation: Stefan's problem. (82f:35187)
- Gariel, J. Sur une méthode de présentation de la thermodynamique classique des procédés irréversibles. (English summary) (82c:80001)
- Golcyn, G. S. (with Gračev, A. A.) Velocities and heat and mass transfer during convection in a two-component medium. (Russian) (82c:86003)
- Grachev, A. A. See Golcyn, G. S., (82c:86003)
- Ibragimov, Š. I. Application of the Abel-Gončarov interpolation process to a problem of finite control. (Russian. Azerbaijani and English summaries) (82c:65086)
- Jamet, Pierre Stability and convergence of a generalized Crank-Nicolson scheme on a variable mesh for the heat equation. (82j:65073)
- Kinderlehrer, David (with Nirenberg, Louis) The smoothness of the free boundary in the one phase Stefan problem. (82h:35152)
- Lugt, Hans J. Multipole decomposition of solutions of the vector diffusion equation. (82b:76020)
- Nirenberg, Louis See Kinderlehrer, David, (82h:35152)
- Nogi, Tatsuo A difference scheme for solving two-phase Stefan problem of heat equation. (82c:65082)
- Pathak, R. S. Expansion of distributions in terms of heat polynomials. (82i:33019)
- Pytel-Kudela, Marzenna On Fourier's problem for the heat equation and for the exterior of the sphere. (82g:35022)
- Šablorskii, O. N. Analytic solutions of parabolic and hyperbolic heat-transfer equations for nonlinear media. (82m:80004)
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- Soward, A. M. A unified approach to Stefan's problem for spheres and cylinders. (82c:80012)
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- Chiarenza, Filippo A maximum principle for the weak subsolutions of second-order linear parabolic equations. (Italian) (82h:35044)
- Colton, David L. Continuation and reflection of solutions to parabolic partial differential equations. (82i:35084)
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- Gor'kov, Ju. P. Behavior of the solution of a boundary value problem for a stationary equation of Brownian motion. (Russian) (82f:35089)
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- Sleeman, B. D. Analysis of diffusion equations in biology. **82f:35098**
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- 35K60 Nonlinear boundary value problems for linear equations and systems; boundary value problems for nonlinear equations and systems**
- Adžalova, N. A. On the existence of a solution in the large of an almost everywhere multidimensional mixed problem for a class of fourth-order semilinear differential equations. (Russian. Azerbaijani and English summaries) 82m:35084
- Agoškov, V. I. Differential properties of solutions of periodic problems of particle transport. (Russian) 82c:35038
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- Chen, Lu San (with Yeh, Cheh Chih) On the Fourier's first problem for a system of nonlinear parabolic equations with unbounded coefficients. 82b:35087
- Czech, Adam See Augustynowicz, Krystyna, 82b:35086
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- Wörz-Busekros, Angelika Erratum: "Solutions to a degenerate system of parabolic equations from marine biology" [J. Math. Biol. 3 (1976), no. 3-4, 393-406; MR 54 #13326]. 82m:35087
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- 35K65 Equations and systems of degenerate type**
- Bertiger, Willy (with Cosner, Chris) Classical solutions to degenerate parabolic equations in unbounded domains. (Italian summary) 82j:35089
- Cosner, Chris See Bertiger, Willy, 82j:35089
- Ebihara, Yukiyo (with Nanbu, Tokumori) Global classical solutions to $u_t - \Delta(u^{2m+1}) + \lambda u = f$. 82c:35039
- Gatibon, V. D. A third-order degenerate quasilinear equation. (Russian) 82b:35055
- Himčenko, B. N. See Kamynin, L. I., 82b:35090
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- Keršner, Robert Degenerate parabolic equations with general nonlinearities. 82b:35056
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- 35K70 Ultraparabolic, pseudoparabolic problems**
- Matlićuk, M. I. (with Pukal'skii, I. D.) An oblique derivative problem for a degenerate parabolic equation. (Russian) 82f:35102
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- Birolì, Marco Régularité hôlderienne pour la solution d'une inéquation parabolique. (English summary) [Hölder continuity for the solution to a parabolic variational inequality] 82j:35090
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35K99 None of the above, but in this section

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35LXX Hyperbolic equations and systems [See also 58G16.]

Sakamoto, Reiko ★Hyperbolic boundary value problems. (Japanese) **82i:35101**

35L05 Wave equation

Babič, V. M. Mathematical methods in elastic wave theory. (Russian summary) (See **82g:31001**)

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Chen, Goong Control and stabilization for the wave equation in a bounded domain. II. **(82i:93007a)**

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Chen, Kuang Ho (with Yang, Chung Chun) Spectral theory for the acoustic wave equations with generalized Neumann boundary conditions in exterior domain. **(82b:35111)**

Citrini, Claudio Counterexamples to the uniqueness of the motion of a string in the presence of a wall. (Italian. English summary) **(82k:73041)**

Colton, David L. Remarks on the inverse scattering problem for low frequency acoustic waves. **(82b:76047)**

Cooper, Jeffery (with Strauss, Walter A.) Holomorphic extension of the scattering amplitude for moving obstacles. **(82f:35148)**

Egorov, A. I. (with Šakirov, V. N.) Optimal control of vibrations of a conductor with a current in a magnetic field. (Russian) **(82c:78025)**

Faerman, Melvin (with Knowles, Ian W.) Nonmodal eigenfunction expansions. **(82j:35112)**

Gabor, S. A. (with Svešnikov, A. G.) Long-wave asymptotic behavior of the Green function of a wave problem on the surface of a stratified fluid. (Russian) **(82d:76088)**

Gaiduk, S. I. On some boundary value problems associated with the theory of transversal impact on a rectangular membrane. (Russian. English summary) **(82g:73015)**

Gowdy, Robert H. The wave equation in asymptotically retarded time coordinates: waves as simple, regular functions on a compact manifold. **(82i:83025)**

Jahno, V. G. One-dimensional inverse problem for the wave equation. (Russian) **(82g:35119)**

- Kirpichnikova, N. Ja. See Babić, V. M., (82b:35013)
 Knowles, Ian W. See Falermann, Mehri, (82j:35112)
 (Kuester, Edward F.) See Babić, V. M.; et al., (82b:35013)
 Lax, Peter D. (with Phillips, Ralph S.) Translation representations for the solution of the non-Euclidean wave equation. II. (82f:43010)
 (Lighthill, Michael James) See Bhatnagar, P. L., (82c:35002)
 Marchionna, Clelia The equation of the vibrating string with variable discontinuous density. (Italian. English summary) (82b:73042)
 Moskvitin, V. N. An inverse problem for the wave equation. (Russian) (82c:76041)
 Müller-Kirsten, H. J. W. Multidimensional perturbation theory for nonseparable wave equations. (82b:35023)
 Petkov, Vesselin High frequency asymptotics of the scattering amplitude for nonconvex bodies. (82c:35061)
 Phillips, Ralph S. See Lax, Peter D., (82f:43010)
 Renno, Pasquale On the theory of dissipative three-dimensional wave motion. (82m:76047)
 Šakirov, V. N. See Egorov, A. I., (82c:78025)
 Sorokina, N. G. Uniqueness of the weak solution of a boundary value problem for the wave equation. (Russian) (82g:35024)
 Strauss, Walter A. See Cooper, Jeffery, (82f:35148)
 Strichartz, Robert S. Asymptotic behavior of waves. (82j:35020)
 Sveinikov, A. G. See Gabov, S. A., (82d:76088)
 Yang, Chung Chun See Chen, Kuang Ho, (82b:35111)

35L10 Second-order equations, general

- Andreev, A. A. On the integration of a system of longitudinally twisting oscillations of a long, naturally twisted cable. (Russian) (82c:35067)
 Arosio, Alberto Asymptotic behaviour as $t \rightarrow +\infty$ of the solutions of linear hyperbolic equations with coefficients discontinuous in time (on a bounded domain). (82c:35105)
 Burkhardt, M. Zur Divisortheorie bei linearen partiellen Differentialgleichungen zweiter Ordnung vom normalen hyperbolischen Typ. (82a:35059)
 Cimbal, V. M. The Cauchy problem for a hyperbolic equation with a small parameter multiplying the derivatives. (Ukrainian. Russian summary) (82c:35054)
 Friedlander, F. G. Radiation fields and hyperbolic scattering theory. (82f:35112)
 Micheletti, Anna Maria Questions of genericity for ergodic motions. (Italian) (82c:35055)
 Sazonov, A. Ju. Fourier's method for singular hyperbolic equations. (Russian) (See 82m:34004)
 Ueno, Tadashi Multidimensional wave equation and an associated group of operators on the boundary. (82g:35065)
 Vagabov, A. I. Multidimensional mixed problem for a hyperbolic system. (Russian) (82g:35066)

secondary classifications:

- Fam Loi Vu Direct and inverse scattering problems for the perturbed equation of a string. (Russian) (82m:35142)
 Florian, H. (with Pügel, Jürgen) Riemannfunktionen als Lösungen gewöhnlicher Differentialgleichungen. (English summary) (82d:35032)
 Pügel, Jürgen See Florian, H., (82d:35032)
 Richter, Herbert Zur Äquivalenz zweier Lösungsdarstellungen eines Anfangs-Randwertproblems für eine hyperbolische Differentialgleichung. (82j:35024)
 Wallner, Herbert \star Riemann-Funktionen als Lösungen partieller Differentialgleichungssysteme. (German) [Riemann functions as solutions for systems of partial differential equations] (82i:35036)
 \star Bergman-Operatoren und Riemann-Funktion bei einer Klasse formalhyperbolischer Differentialgleichungen. (German) [Bergman operators and Riemann function in a class of formal hyperbolic differential equations] (82j:35037)

35L15 Second-order equations, initial value problems

- Colombini, Ferruccio (with Spagnolo, Sergio) Second order hyperbolic equations with coefficients real analytic in space variables and discontinuous in time. (82c:35106)
 Imai, Masato On a parametrix for a weakly hyperbolic operator. (82b:35094)
 Lomonosova, T. B. See Volkodavov, V. F., (82b:35096)
 Mazumdar, Tapas Existence of solutions for linear systems and hyperbolic problems with variable domains. (82k:35068)
 Nishitani, Tatsuo The Cauchy problem for weakly hyperbolic equations of second order. (82i:35107)
 Pjatkov, S. G. Local solvability of the Cauchy problem and boundary value problems for certain nonlinear hyperbolic equations. (Russian) (82b:35095)
 Spagnolo, Sergio See Colombini, Ferruccio, (82c:35106)
 Volkodavov, V. F. (with Lomonosova, T. B.) A class of generalized solutions for the Euler-Darboux equation with parameters of various signs. (Russian) (82b:35096)

secondary classifications:

- Geel, R. Linear initial value problems with a singular perturbation of hyperbolic type. (82k:35099a)
 Nonlinear initial value problems with singular perturbation of hyperbolic type. (82k:35099b)
 See also Jager, E. M., (82i:35017)
 de Jager, E. M. (with Geel, R.) Singular perturbations of hyperbolic type. (82i:35017)
 Marshall, Bernard (with Strauss, Walter A.; Wainger, Stephen) L^p - L^q estimates for the Klein-Gordon equation. (82j:35133)
 Strauss, Walter A. See Marshall, Bernard; et al., (82j:35133)
 Wainger, Stephen See Marshall, Bernard; et al., (82j:35133)

35L20 Second-order equations, boundary value problems

- Airapetjan, R. G. Conditions for the well-posedness of the mixed problem for a strictly

hyperbolic operator when the Lopatinskiĭ condition is not satisfied. (Russian)

- (82c:35069)
 Akopian, G. S. The homogeneous Dirichlet problem for a pencil of differential operators in a space of vector-valued functions. (Russian. Armenian and English summaries) (82m:35092)
 Aliev, N. A. (with Bagirov, G. A.) Solution of mixed problems for regions with movable boundaries. (Russian) (82m:35093)
 Allouche, Jean-Paul Vibrations de classe $C^{r/2}$ des tores plats de dimension s et théorie des nombres. (82f:35113)
 Asano, Kazuo On energy inequalities for the mixed problems for the wave equation in a domain with a corner. (82d:35055)
 Bagirov, G. A. See Aliev, N. A., (82m:35093)
 Drin', M. M. See Lenjuk, M. P., (82g:35067)
 Eskin, G. I. Well-posedness and propagation of singularities for initial-boundary value problem for second order hyperbolic equation with general boundary condition. (82c:35056)
 Garcia R., Catherine (with Minzoni, A. A.) An asymptotic solution for the wave equation in a time-dependent domain. (82b:35058)
 Gordienko, V. M. Symmetrization of a mixed problem for a second-order hyperbolic equation with two space variables. (Russian) (82c:35108)
 Krivošija, S. A. See Mitropol'skii, Ju. A., (82j:35094)
 Lasiecka, Irena (with Triggiani, Roberto) A cosine operator approach to modeling $L_2(0, T; L_2(\Gamma))$ -boundary input hyperbolic equations. (82b:35097)
 Lenjuk, M. P. (with Drin', M. M.) A generalized nonstationary problem of heat conduction in a strip under mixed boundary conditions. (Russian. English summary) (82g:35067)
 Mel'nik, T. E. Conjugation of the second-order hyperbolic equation solutions along the unknown boundary. (Russian. English summary) (82b:35059)
 Minzoni, A. A. See Garcia R., Catherine, (82b:35058)
 Miranda, Manuel Milla Convergence d'un certain type d'opérateurs hyperboliques. (English summary) (82a:35060)
 Mitropol'skii, Ju. A. (with Krivošija, S. A.) Asymptotic solution for a class of boundary value problems. (Russian) (82j:35094)
 Šaliev, N. K. Asymptotic behavior with respect to the small parameter of the solution of the mixed problem for a hyperbolic equation. (Russian) (82c:35109)
 Su, Yu Cheng Asymptotic solution of mixed singular perturbation problems for second-order quasilinear hyperbolic partial differential equations. (Chinese. English summary) (82c:35040)
 Triggiani, Roberto See Lasiecka, Irena, (82b:35097)

secondary classifications:

- Kojima, Kiyofumi (with Taniguchi, Masaru) Mixed problem for hyperbolic equations in a domain with a corner. (82g:35070)
 Kuliev, M. A. See Namazov, G. K., (82c:35081)
 Namazov, G. K. (with Kuliev, M. A.) Determination of the right-hand side of a nonlinear hyperbolic equation. (Russian) (82c:35081)
 Natrošvili, D. G. Solution of dynamic problems for the sphere. (Russian. Georgian and English summaries) (82j:73018)
 Pjatkov, S. G. Local solvability of the Cauchy problem and boundary value problems for certain nonlinear hyperbolic equations. (Russian) (82b:35095)
 Sarason, Leonard Second-order equations of fixed type in regions with corners. I. (82j:35036)
 Taniguchi, Masaru See Kojima, Kiyofumi, (82g:35070)

35L25 Higher-order equations, general

- Godunov, S. K. (with Kostin, V. I.) Reduction of a hyperbolic equation to a symmetric hyperbolic system in the case of two space variables. (Russian) (82d:35056)
 Komatsu, Hikosaburo Linear hyperbolic equations with Gevrey coefficients. (82f:35114)
 Kostin, V. I. See Godunov, S. K., (82d:35056)
 Salyga, B. O. Analogue of a multipoint problem for a hyperbolic operator (in the sense of Gårding). (Ukrainian. Russian summary) (82f:35115)

secondary classifications:

- Fitzgibbon, William E. Strongly damped quasilinear evolution equations. (82b:34083)
 Naliev, A. M. Criterion for the uniqueness of the solution of the Darboux problem for a degenerate hyperbolic equation of moisture transfer. (Russian) (82c:35045)

35L30 Higher-order equations, initial value problems

- Aldalev, S. A. The Cauchy problem for operators that decompose into factors with singularities. (Russian) (82c:35057)
 Bromstein, M. D. The Cauchy problem for hyperbolic operators with characteristics of variable multiplicity. (Russian) (82m:35094)
 Čučeva, N. A. A mixed problem for a fourth-order equation. (Russian) (82b:35098)
 Gårding, Lars Mathematics of invariant wave equations. (82b:35073)
 Guillot, Jean-Claude (with Ralston, James V.) Les ondes latérales comme phénomènes de propagation de singularités. (English summary) (82b:35099)
 Jeffrey, Alan (with Mvungi, John) On the breaking of water waves in a channel of arbitrarily varying depth and width. (French summary) (82c:35070)
 Mvungi, John See Jeffrey, Alan, (82c:35070)
 Nakamura, Gen (with Uryu, Hitoshi) Parametrix of certain weakly hyperbolic operators. (82a:35061)
 Nikonov, V. A. See Nikonova, G. A., (82f:35116)
 Nikonova, G. A. (with Nikonov, V. A.) The Cauchy problem for partially hyperbolic operators with constant coefficients. (Russian) (82f:35116)
 Ralston, James V. See Guillot, Jean-Claude, (82b:35099)
 Roberts, Gary B. (with Wenston, Paul R.) Uniqueness in the Cauchy problem for weakly hyperbolic operators not satisfying Levi conditions. (82k:35071)

- Schiltz, Dominique (with Vaillant, Jean; Wagschal, Claude) Problème de Cauchy ramifié à caractéristiques multiples en involution. (English summary) **82a:35062**
- Šopokov, N. N. The Cauchy problem for a fourth-order hyperbolic differential equation with many spatial variables. (Bulgarian. Russian and French summaries) **82c:35041**
- Uryu, Hitoshi See Nakamura, Gen, **82a:35061**
- Vaillant, Jean See Schiltz, Dominique; et al., **82a:35062**
- Wagschal, Claude See Schiltz, Dominique; et al., **82a:35062**
- Wenston, Paul R. See Roberts, Gary B., **82c:35071**
- Yamamoto, Kazuhiro The Cauchy problem for some class of hyperbolic differential operators with variable multiple characteristics. **82c:35072**

secondary classifications:

- Ichinose, Wataru Propagation of singularities for a hyperbolic equation with nonregular characteristic roots. (**82a:35099**)
- Kusano, Takasi (with Yoshida, Norio) Oscillation criteria for a class of nonlinear partial differential equations. (**82c:35013**)
- Persson, Jan Partial hyperbolicity and partial Gevrey classes. (**82m:35020**)
- Wagschal, Claude Le problème de Goursat non linéaire. (**82m:35024**)
- Yoshida, Norio See Kusano, Takasi, (**82c:35013**)

35L35 Higher-order equations, boundary value problems

- Abdul-Latif, Ali I. The Dirichlet boundary value problem for the system $u_{x_j y_j} = 0$, $j \neq i$. **82d:35057**
- The Dirichlet problem for the equation $U_{x_1 \dots x_n} = 0$. **82d:35058**
- Gindikin, S. G. (with Volevič, L. R.) Sur le problème mixte pour des opérateurs différentiels à partie quasi-homogène. (English summary) **82a:35063**
- See also Volevič, L. R., **82c:35042**
- Hudaverdiev, K. I. (with Tahirov, B. O.) Investigation of a weakly generalized solution of a multidimensional mixed problem with general boundary conditions for hyperbolic equations with a nonlinear operator right-hand side. (Russian. Azerbaijani and English summaries) **82g:35068**
- Kočanov, A. I. A mixed problem for the equation $u_{tt} - \operatorname{div}(\nabla u) - (\partial/\partial t)\Delta u = 0$ in n -dimensional space. (Russian) **82f:35117**
- Ni, Xing Tang Boundary value problems with three characteristic supports for linear totally hyperbolic equation of the third order. **82b:35100**
- Tahirov, B. O. See Hudaverdiev, K. I., **82g:35068**
- Uchiyama, Kōichi Characteristic boundary value problems for hyperbolic equations. **82m:35095**
- Volevič, L. R. (with Gindikin, S. G.) The method of energy estimates in the mixed problem. (Russian) **82c:35042**
- See also Gindikin, S. G., **82a:35063**
- Wakabayashi, Seichiro A necessary condition for the mixed problem to be C^∞ well-posed. **82d:35059**

secondary classifications:

- Ball, John M. Les séries de Fourier non harmoniques et la stabilisation d'une tige vibrante. [Nonharmonic Fourier series and the stabilization of a vibrating rod] (See **82c:35002**)
- Hudaverdiev, K. I. (with Tahirov, B. O.) Investigation of a strongly generalized solution of a multidimensional mixed problem with general boundary conditions for hyperbolic equations with a nonlinear operator right-hand side. (Russian. Azerbaijani and English summaries) (**82c:35079**)
- Sanchez, Luis Periodic solutions of a nonlinear evolution equation with a linear dissipative term. (**82f:35012**)
- Tahirov, B. O. See Hudaverdiev, K. I., (**82c:35079**)

35L40 First-order systems, general

- Balas, Mark J. Feedback control of wave propagation in symmetric hyperbolic PDE systems. **82a:35064**
- Gilliam, David S. Vector potentials for symmetric hyperbolic systems. **82g:35069**
- Umbetžanov, D. U. Investigation of almost-multiperiodic solutions of hyperbolic systems by means of reduction to canonical form. (Russian. Kazakh summary) **82c:35110**
- Zaicev, V. A. On the existence of sharp waves for a first-order system. (Russian) (See **82m:34004**)

secondary classifications:

- Bassanini, Piero (with Cesarina Salvatori, M.) A theorem of existence and uniqueness in nonlinear optics. (Italian summary) (**82c:78003**)
- Cesarina Salvatori, M. See Bassanini, Piero, (**82c:78003**)
- Ljapidevskii, V. Ju. A problem of the decay of discontinuity for two-layered "shallow water" equations. (Russian) (**82m:76007**)
- Petkov, Vesselin Représentation de l'opérateur de diffusion pour des systèmes hyperboliques dissipatifs. (English summary) (**82a:35089**)

35L45 First-order systems, initial value problems

- Kuzmanov, L. N. Necessary conditions for well-posedness of the Cauchy problem for a class of nonsymmetrizable first-order operators. (Russian. Bulgarian and English summaries) **82c:35111**
- Li, Da Qian Global regularity and formation of singularities of solutions to first order quasilinear hyperbolic systems. **82c:35058**
- Matsumoto, Waichirō Sur l'espace de données admissibles dans le problème de Cauchy. (English summary) **82f:35118**
- On the conditions for the hyperbolicity of systems with double characteristic roots. I. **82m:35096a**
- On the condition for the hyperbolicity of systems with double characteristic roots. II. **82m:35096b**

- Niizeki, Shyōzō See Yamaguti, Masaya, **82c:35043**
- Petkov, Vesselin The parametrix of the Cauchy problem for nonsymmetrizable hyperbolic systems with characteristics of constant multiplicity. (Russian) **82d:35060**
- Rauch, Jeffrey Asymptotic behavior of solutions to hyperbolic partial differential equations with zero speeds. **82d:35061**
- Schatzman, Michelle Fonctionnelle de Glimm continue. (English summary) **82k:35074**
- Tarama, Sigeo Sur le problème de Cauchy pour une classe de systèmes faiblement hyperboliques dans une classe de Gevrey. **82a:35065**
- Villani, A. See di Vincenzo, R., **82c:35112**
- di Vincenzo, R. (with Villani, A.) On a boundary value problem for a third-order linear equation of hyperbolic type. Existence, uniqueness and representation of the solution. (Italian. English summary) **82c:35112**
- Yamaguti, Masaya (with Niizeki, Shyōzō) On the Cauchy problem for a semilinear hyperbolic system. **82c:35043**

35L50 First-order systems, boundary value problems

- Airapetjan, R. G. Weak L^2 -well-posedness of mixed problems for hyperbolic systems. (Russian. Armenian summary) **82f:35119**
- Cazzani Neri, Maria Grazia An existence theorem for systems of quasilinear partial differential equations. (Italian) **82b:35060**
- Ivrii, V. Ja. Wave fronts of solutions of boundary value problems for a class of symmetric hyperbolic systems. (Russian) **82a:35066**
- Kojima, Kiyofumi (with Taniguchi, Masaru) Mixed problem for hyperbolic equations in a domain with a corner. **82g:35070**
- Kubota, Kōji Microlocal parametrix for mixed problems for symmetric hyperbolic systems with diffractive boundary. **82m:35097**
- Lukšin, A. V. Properties of the solution of the Goursat problem for a quasilinear system. (Russian) **82c:35113**
- Marcus, Moshe (with Mizel, Victor J.) Semilinear hereditary hyperbolic systems with nonlocal boundary conditions. I. **82f:35120a**
- (with Mizel, Victor J.) Semilinear hereditary hyperbolic systems with nonlocal boundary conditions. II. **82f:35120b**
- Mizel, Victor J. See Marcus, Moshe, **82f:35120**
- Ohkubo, Toshio Regularity of solutions to hyperbolic mixed problems with uniformly characteristic boundary. **82c:35114**
- Povaas, M. On some singular hyperbolic evolution equations. **82g:35071**
- Taniguchi, Masaru See Kojima, Kiyofumi, **82g:35070**

secondary classifications:

- Beirão da Veiga, Hugo On the barotropic motion of compressible perfect fluids. (**82i:76070**)
- Belinskii, S. P. (with Romanov, V. G.) On the problem of determining the coefficients of a t -hyperbolic system. (Russian) (**82c:35080**)
- Bhatnagar, Hari L. See Mal, S. B., (**82h:78015**)
- Geveci, Tunc Boundary controllability of hyperbolic partial differential equations. (**82f:93007**)
- Gol'dberg, V. N. Convergence of the solution of a mixed problem for a hyperbolic system on the plane with singularly perturbed boundary condition to the solution of a degenerate problem. I. (Russian) (**82h:35062a**)
- Convergence of the solution of a mixed problem for a hyperbolic system on the plane with singularly perturbed boundary condition to the solution of a degenerate problem. II. (Russian) (**82h:35062b**)
- Gordienko, V. M. Symmetrization of a mixed problem for a second-order hyperbolic equation with two space variables. (Russian) (**82c:35108**)
- Mal, S. B. (with Bhatnagar, Hari L.) Scattering of electromagnetic waves by inhomogeneous spherical particles. (**82h:78015**)
- Romanov, V. G. See Belinskii, S. P., (**82c:35080**)
- Syed, Ansaruddin The diffraction of electromagnetic waves by a finite perfectly conducting cone. (**82h:78021**)
- Vitjuk, A. N. Solvability and the difference method for solving a boundary value problem for a system of differential equations of hyperbolic type. (Russian) (**82c:65060**)

35L55 Higher-order hyperbolic systems

- Andreer, A. A. On a class of systems of differential equations of hyperbolic type. (Russian) **82k:35075**
- Gourdin, Daniel Problème de Cauchy pour des systèmes hyperboliques à caractéristiques de multiplicité variable. (English summary) **82f:35121**
- John, Fritz How rare are hyperbolic systems? (Russian) **82b:35101**
- Kondrat'ev, V. A. The Cauchy problem for hyperbolic systems when the initial surface has characteristic points. (Russian) **82h:35061**
- Matsumoto, Waichirō Sur la condition de Levi: problème de Cauchy pour les systèmes à caractéristiques doubles. **82b:35102**
- Nemirovskii, Ju. V. (with Štemenzon, K. M.) Dynamical compactness of wave processes described by linear hyperbolic systems of second-order partial differential equations. (Russian) **82c:35044**
- Štemenzon, K. M. See Nemirovskii, Ju. V., **82c:35044**
- Vainberg, B. R. Stabilization of the solutions of exterior problems for hyperbolic systems. (Russian) **82h:35103**

secondary classifications:

- Chan, C. Y. (with Young, Eutiquio C.) Comparison theorems for a coupled system of singular hyperbolic differential inequalities. I. Time-independent uncoupling coefficients. (Italian summary) (**82j:35099a**)
- (with Young, Eutiquio C.) Comparison theorems for a coupled system of singular hyperbolic differential inequalities. II. Time-dependent coefficients with mixed coupled boundary conditions. (Italian summary) (**82j:35099b**)

Marčuk, N. G. Existence of solutions to a mixed problem for the vector wave equation. (Russian) (82b:35092)

Rauch, Jeffrey Asymptotic behavior of solutions to hyperbolic partial differential equations with zero speeds. (82d:35061)

Young, Eutiquio C. See Chan, C. Y., (82j:35009a) and (82j:35009b)

35L60 First-order nonlinear equations and systems

Barbu, Viorel (with Moroşanu, Gheorghe) Existence for a nonlinear hyperbolic system. 82i:35115

Cinquini, Silvio On hyperbolic systems of (nonlinear) partial differential equations in several independent variables. (Italian) 82m:35098

Gol'dberg, V. N. Convergence of the solution of a mixed problem for a hyperbolic system on the plane with singularly perturbed boundary condition to the solution of a degenerate problem. I. (Russian) 82b:35062a

Convergence of the solution of a mixed problem for a hyperbolic system on the plane with singularly perturbed boundary condition to the solution of a degenerate problem. II. (Russian) 82b:35062b

Hoff, David A constructive theory for shock-free, isentropic flow. 82b:35104

Li, Da Qian Problèmes aux limites et solutions discontinues pour les systèmes hyperboliques quasi linéaires d'ordre 1. 82d:35062

Moroşanu, Gheorghe Existence for nonlinear differential systems of hyperbolic type. 82f:35122

See also Barbu, Viorel, 82i:35115

V'lkov, L. G. Nonregularity of the classical solution of a quasilinear hyperbolic diagonal system. (Russian. Bulgarian and English summaries) 82c:35059

Wang, Jing Hua See Ying, Long An, 82a:35067

Ying, Long An (with Wang, Jing Hua) Global solutions of the Cauchy problem for a nonhomogeneous quasilinear hyperbolic system. 82a:35067

secondary classifications:

Borejko, P. (with Chadwick, P.) Energy relations for acceleration waves in elastic materials. (82b:73022)

Chadwick, P. See Borejko, P., (82b:73022)

Giambo, Sebastiano Sur l'équation de transport pour une onde multiple en relativité restreinte. (English summary) (82f:83004)

35L65 Conservation laws [See also 76--XX.]

Conlon, Joseph G. (with Liu, Tai Ping) Admissibility criteria for hyperbolic conservation laws. 82j:35095

Crupi, Giovanni (with Donato, Andrea) A class of conservative and hyperbolic completely exceptional equations which are compatible with a supplementary conservation law. (Italian. English summary) 82m:35099

Dafermos, Constantine M. Can dissipation prevent the breaking of waves? 82a:35068

Donato, Andrea See Crupi, Giovanni, 82m:35099

Fomin, V. M. See Ruev, G. A.; et al., 82b:35105

Hsiao, L. The entropy rate admissibility criterion in gas dynamics. 82f:35123

Janenko, N. N. See Ruev, G. A.; et al., 82b:35105

Liu, Tai Ping Admissible solutions of hyperbolic conservation laws. 82i:35116

See also Conlon, Joseph G., 82j:35095

Qin, Meng Zhao See Tu, Gui Zhang, 82m:35100

Rogers, Joel C. W. Stability, energy conservation and turbulence for water waves. 82b:35063

Rožděstvenskii, B. L. See Ruev, G. A.; et al., 82b:35105

Ruev, G. A. (with Rožděstvenskii, B. L.; Fomin, V. M.; Janenko, N. N.) Conservation laws for systems of two-phase medium equations. (Russian) 82b:35105

Ruggeri, Tommaso On the conservative form of quasilinear hyperbolic systems. The case of ionized gases and relativistic thermohydrodynamics. (Italian. English summary) 82f:35124

Šugrin, S. M. Galilean systems of differential equations. (Russian) 82b:35064

Temple, J. Blake Solutions in the large for the nonlinear hyperbolic conservation laws of gas dynamics. 82i:35117

Tu, Gui Zhang (with Qin, Meng Zhao) Relationship between symmetries and conservation laws of nonlinear evolution equations. (Chinese. English summary) 82m:35100

secondary classifications:

Abellanas, L. (with Galindo, A.) Conserved densities for linear evolution systems. (82j:58059)

Aswarthanarayana, C. See Purushotham, G., (82b:76032)

Bampi, Franco (with Morro, Angelo) Mixture approach to a model for sediment transport. (82b:76059)

Bersadskii, A. G. Energy conservation law and uniqueness of the classical solutions of nonlinear MHD problems. (82b:76063)

Cheng, Kuo Shun Asymptotic behavior of solutions of a conservation law without convexity conditions. (82b:35008)

Galindo, A. See Abellanas, L., (82j:58059)

Ginibre, Jean (with Velo, Giorgio) On a class of nonlinear Schrödinger equations. III. Special theories in dimensions 1, 2 and 3. (82c:35059)

(with Velo, Giorgio) On a class of nonlinear Schrödinger equations. I. The Cauchy problem, general case. (82c:35057)

Hyman, James M. A method of lines approach to the numerical solution of conservation laws. (82c:65073)

Iwatani, Mitsuo See Satofuka, Nobuyuki, (82b:65159)

Kawashima, Shuichi Global solution of the initial value problem for a discrete velocity model of the Boltzmann equation. (82g:76028)

Korjakin, V. M. Laws of conservation on manifolds of class C^∞ . (Russian) (82b:83053)

Kraiko, A. N. On discontinuity surfaces in a medium devoid of "proper" pressure. (82i:76089)

Morro, Angelo See Bampi, Franco, (82b:76059)

OuYoung, Kuong Lin Periodic solutions of conservation laws. (82a:34077)

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- Shankar, Rama (with Prasad, Mohan) On the nonuniform propagation of weak discontinuities in magnetogasdynamics. (82j:76043)
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- Vefrisov, P. A. Asymptotic investigation of nonlinear effects in the problem of unsteady supersonic flow past a profile. (82j:730059)
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- Belanitskii, D. A. The Cauchy problem for a quasilinear equation. (Russian. Georgian and English summaries) 82d:35063
- Blanchard, Ph. (with Brüning, Erwin) Über spezielle Klassen von Lösungen der nicht-linearen hyperbolischen Gleichung $\square u = F(u)$. (English summary) 82a:35071
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- Asrorov, A. (with Hudaverdiev, K. I.) Investigation of the periodic solution almost everywhere of a one-dimensional boundary value problem for nonlinear hyperbolic second-order equations. (Russian) (82f:35010)
- Bahri, Abbas (with Brézis, Haim) Periodic solution of a nonlinear wave equation. (82f:35011)
- Brézis, Haim See Bahri, Abbas, (82f:35011)
- Drechsler, W. Does a moving nonabelian charge radiate? (82g:81051)

- Glimskii, G. F. Nonlinear electrodynamics and anisotropic space-time. (Russian) (82b:78004)
- Hofer, Helmut A multiplicity result for a class of nonlinear problems with application to a nonlinear wave equation. (82c:47080)
- Hudaverdiev, K. I. See Asrorov, A., (82f:35010)
- Kisielewicz, Michał On the nonconvergence of successive approximations in the theory of the equation $z''_{yy} = f(x, y, z, z'_x, z'_y)$. (82j:35008)
- Lar'kin, N. A. Effect of boundary conditions and the right-hand side on the solvability of a mixed problem for a class of degenerate hyperbolic equations. (Russian) (82m:35007)
- Molotkov, I. A. (with Vakulenko, S. A.) Nonlinear longitudinal waves in inhomogeneous rods. (Russian. English summary) (82b:73021)
- Nakao, Mitsuhiro Existence of classical periodic solutions of some nonlinear wave equations in one space dimension. (82b:35005)
- Paneitz, S. M. (with Segal, I. E.) Quantization of wave equations and Hermitian structures in partial differential varieties. (82g:81040)
- Pjatkov, S. G. Local solvability of the Cauchy problem and boundary value problems for certain nonlinear hyperbolic equations. (Russian) (82b:35095)
- Procopiuc, Gh. The Cauchy problem in relativistic theory of radiation field. (82c:83042)
- Segal, I. E. See Paneitz, S. M., (82g:81040)
- Vakulenko, S. A. See Molotkov, I. A., (82b:73021)
- Vladimirov, S. A. Automorphic systems of scalar fields. (Russian. English summary) (82g:81065)
- Willem, Michel Periodic solutions of wave equations with jumping nonlinearities. (82f:35013)
- Density of the range of potential operators. (82k:47080)

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- Schatzman, Michelle The penalty method for the vibrating string with an obstacle. 82i:35124
- Tahirov, B. O. See Hudaverdiev, K. I., 82k:35079
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- Kasumov, K. R. The effect of a singular perturbation on the solution of a mixed problem. (Russian) (82f:35015)
- Kerbrat, Yvan Une équation différentielle associée à l'espace hyperbolique standard. (English summary) (82f:35055)
- Travis, Curtis C. (with Yoshida, Norio) Oscillation criteria for third order hyperbolic characteristic initial value problems. (82i:35014)
- Yoshida, Norio See Travis, Curtis C., (82i:35014)

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- Nahusev, A. M. Criterion for the uniqueness of the solution of the Darboux problem for a degenerate hyperbolic equation of moisture transfer. (Russian) 82c:35045
- Radzabov, N. R. (with Rasulov, A.) Representation of a manifold of solutions of a class of a system of higher-order differential equations with a singular line. (Russian) (See 82m:34002)
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- Semerdzheva, R. I. On a boundary value problem for a degenerate hyperbolic equation. (Russian) 82k:35081

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- Orzov, I. A boundary value problem with shift for a generalized Tricomi problem. (Russian) (82f:35137)
- Rassias, John Michael The Cauchy problem for a second-order nonlinear hyperbolic equation with initial data on a line of parabolicity. (82i:35123)
- Zabov, V. I. The problem of the existence of an electromagnetic field causing given motions of charged particles. (Russian) (82b:78011)

35L85 Unilateral problems; variational inequalities [See also 35R35, 49A29.]

- Li, Da Qian On a free boundary problem. (Chinese summary) 82i:35125

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- Grzegorzczak, Józef Stability of the initial-boundary value problem describing the time variation of voltages and currents in a two-wire long line. **82j:35100**
- Janssen, Arnold (with Siebert, Eberhard) Convolution semigroups and generalized telegraph equations. **82m:35105**
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- Ogawa, Hajimu Energy decay for differential inequalities in a Hilbert space with applications to ultrahyperbolic equations. **82m:35106**
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- Ansari, M. A. See Babu, R., **(82g:76045)**
- Babu, R. (with Ansari, M. A.) Plane magnetohydrodynamic viscous flows with constantly inclined magnetic and velocity field. **(82g:76045)**
- Bagdoev, A. G. (with Movsisjan, L. A.) The modulation equations in nonlinear dispersive media and their application to waves in thin bodies. (Russian. Armenian and English summaries) **(82e:73034)**
- Bazley, Norman W. Abstract nonlinear wave equations: existence, linear and multilinear cases, approximation, stability. **(82i:34071)**
- Berljand, L. V. Convergence of the resolutions of the identity for the operators of the second boundary value problem. (Russian) **(82h:47019)**
- Birolì, Marco Almost periodicity and asymptotic behavior for the solutions of a nonlinear wave equation. (See **82d:34003**)
- Blohin, A. M. A mixed problem for a three-dimensional system of equations of acoustics with boundary conditions on the shock wave. (Russian) **(82m:76051)**
- Duff, G. F. D. A gulf and ocean model of the Bay of Fundy tides, and their response to barrier construction and operation. **(82i:86002)**
- Fiskov, A. L. See Slepjan, L. I., **(82c:73075)**
- Genov, A. (with Petrov, I.) Quenching of oscillations in a nonlinear hyperbolic system. (Russian) (See **82k:70002b**)
- Giambò, Sebastiano (with Turrisi, E.) Waves of discontinuity and conditions of exceptionality in isotropic hypoelastic media of degree zero. (Italian. English summary) **(82d:73018)**
- Goldstein, Jerome A. (with Sandefur, James T., Jr.) Equipartition of energy for higher-order hyperbolic equations. **(82h:34078)**
- Grinfe'd, M. A. Ray method of calculating the wave front intensity in nonlinearly elastic material. **(82j:73024)**
- On the theory of the ray method of investigating wave fronts in nonlinear problems. (Russian) **(82k:35101)**
- Henriques de Brito, Eliana A nonlinear hyperbolic equation. **(82d:34091)**
- Homa, G. P. Asymptotic methods for investigating wave solutions of second-order partial differential equations. (Russian) **(82k:35019)**
- Kobitov, U. E. Regularization of an abstract Cauchy problem for a second-order operator-differential equation. (Russian) **(82j:34063)**
- Lascar, Bernard Le noyau de l'équation des ondes sur une variété riemannienne compacte comme intégrale de chemins. **(82f:58000)**
- Lauro, Giuliana (with Renno, Pasquale) On the Huygens principle in a "cold" plasma. (Italian. English summary) **(82d:76100)**
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- Šeluhin, V. V. Periodic flows of a viscous gas. (Russian) **(82e:76046)**
- Serapioni, Raul On quasilinear equations of hyperbolic type. (Italian summary) **(82j:34070)**
- Slepjan, L. I. (with Fiskov, A. L.) A two-dimensional mixed problem with an irregularly moving boundary condition separation point. (Russian) **(82c:73075)**
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- Turrisi, E. See Giambò, Sebastiano, **(82d:73018)**
- Vejroda, O. (with Straskraba, I.) Perturbed nonlinear abstract equations. **(82g:47043)**

35M05 Equations and systems of mixed (Tricomi, etc.) or composite type [For degenerate types, elliptic, see 35Jxx, parabolic, see 35Kxx, hyperbolic, see 35Lxx, etc.]

- Abdinazarov, S. See Džuraev, T. D., **82h:35070**
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- Chen, De Quan See Ji, Xin Hua, **82k:35084**
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- Džuraev, T. D. (with Sopuev, A.) A three-dimensional problem for an equation of mixed parabolic-hyperbolic type. (Russian) **82m:35107**
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- Egorov, I. E. Solvability of the first mixed problem for a hyperbolic-parabolic equation in an energy class. (Russian) **82g:35077**
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- Ganeev, R. M. Some Bicadze-Samarskii-type problems for a system of equations of mixed type. (Russian) **82j:35102**
- Gatobon, V. D. A boundary value problem for a degenerate quasilinear system of equations of composite type. (Russian) **82h:35107**
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- On partial differential equations of mixed type in n independent variables. **82d:35067**
- Hallia, M. E. Continuous dependence of a generalized solution of a mixed problem for a system of hyperbolic-parabolic second-order equations with retarded argument. (Russian) **82f:35134**
- He Kan Čer Uniqueness of the solution of the Tricomi problem for an equation with two lines of degeneration. (Russian) **82k:35083**
- Ivaškina, G. A. On problems of Bicadze-Samarskii type for the equation $U_{xx} + \operatorname{sgn} y |y|^m U_{yy} = 0$ ($0 < m < 1$). (Russian) **82i:35126**
- Janenko, N. N. Some equations of variable type. (Russian) **82f:35135**
- Janišauskas, A. I. On the well-posedness of boundary value problems for multidimensional equations of mixed type. (Russian) **82j:35103**
- Ji, Xin Hua (with Chen, De Quan) On partial differential equations of mixed type in n -dimensional real projective space. (Chinese) **82k:35084**
- Kal'menov, T. Š. (with Otelbaev, M. O.) Regular boundary value problems for the Lavrent'ev-Bicadze equation. (Russian) **82j:35104**
- Karatoprakliev, G. D. On a boundary value problem for a Lavrent'ev-Bicadze equation. (Russian) **82g:35078**
- Kishor, N. V. Boundary value problems for an equation of mixed type in a rectangular domain. (Russian) **82g:35079**
- Krein, S. G. (with Polička, N. P.) Behavior of the solutions of boundary value problems for the Lavrent'ev-Bicadze equation under variation of the domain. (Russian) **82h:35071**
- Krikunov, Ju. M. A special case of the equation $K(y)u_{xx} + u_{yy} + (l(y)/y)u_y = 0$. (Russian) **82k:35127**
- Modified Tricomi problem for the equation $u_{xx} + yu_{yy} - \frac{1}{2}u_y = 0$. (Russian) **82h:35072**
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- Kurbatov, N. M. On the Dirichlet problem for a system of second-order equations of composite type. (Russian) **82m:35106**
- Lar'kin, N. A. Solvability in the large of a mixed problem for a nonlinear nonstationary analogue of the iterated Tricomi operator. (Russian) **82e:35046**
- Realization of global solutions to nonlinear equations of mixed type. (Russian) **82j:35105**
- Lavrent'ev, M. M., Jr. Properties of approximate solutions of nonlinear equations of variable type. (Russian) **82c:35047**
- Li, Da Qian (with Yu, Wen Ci; Shen, Wei Xi) Second initial-boundary value problems for quasilinear hyperbolic-parabolic coupled systems. (Chinese. English summary) **82h:35073**
- Makarov, I. A. The Frankl' problem and formulas for inversion of certain integral equations with special functions in the kernels. (Russian) **82i:35128**
- Medeiros, L. A. Nonlinear hyperbolic-parabolic partial differential equations. **82f:35136**
- Meredov, M. Boundary value problems for a system of multidimensional mixed equations. (Russian) **82j:35106**
- Mihailov, K. I. A boundary value problem for an equation of mixed type with discontinuous coefficients. (Bulgarian. Russian and French summaries) **82c:35048**
- Mirsaburov, M. A nonlocal boundary value problem for an equation of mixed type with singular coefficients on a line of degeneration. (Russian) **82j:35107**
- Mullover, S. (with Sanginov, A.) A system of equations of composite type in space. (Russian) (See **82m:34002**)
- Nagornyi, A. M. Boundary value problems for a degenerate equation of hyperbolic-parabolic type. (Russian) **82m:35109**
- See also Salakhitdinov, M. S., **82i:35131**
- Orazov, D. The Darboux problem for a nonlinear hyperbolic-parabolic system of equations in the plane. (Russian) **82c:35049**
- Orazov, I. A boundary value problem with shift for a generalized Tricomi problem. (Russian) **82f:35137**
- Otelbaev, M. O. See Kal'menov, T. Š., **82j:35104**
- Pastuhov, D. I. A problem with shift for a fourth-order equation of mixed-composite type. (Russian) **82c:35050**
- Plešinskii, N. B. On the solution of boundary value problems for the generalized Tricomi equation by the method of integral equations. (Russian) **82g:35000**
- Polička, N. P. Stability of solutions of the Tricomi problem for a Lavrent'ev-Bicadze equation with variation of the domain. (Russian) **82d:35068**
- See also Krein, S. G., **82h:35071**
- Ponomarev, S. M. On the theory of the Tricomi problem for the Lavrent'ev-Bicadze equation with a spectral parameter. (Russian) **82m:35110**
- Rassias, John Michael The survey on equations of mixed type. **82g:35081**

Weak and semistrong solutions of the Schneider-Tricomi problem in the Euclidean plane. **82f:35138a**

A uniqueness theorem for the Chaplygin-Frankl problem. **82f:35138b**
On the Frankl problem of second kind. **82a:35076**

On a defective theorem on elliptic-hyperbolic equations. **82i:35129**

A mixed type equation in a doubly connected domain. **82i:35130**

Corrigenda: "Weak and semistrong solutions of the Schneider-Tricomi problem in the Euclidean space"; "A uniqueness theorem for the Chaplygin-Frankl problem". **82f:35138c**

Sabitov, K. B. The problem M for the equation $x''u_{xx} + \text{sign } y_{yy} = 0$ in an infinite mixed domain. (Russian) **82d:35069**

Uniqueness of the solution of the Tricomi problem for an equation of mixed type of the second kind. (Russian) **82a:35077**

Formulation of boundary value problems for an equation of mixed type with degeneration of the second kind on the boundary of an infinite domain. (Russian) **82b:35110**

Salakhidinov, M. S. (with Nagorniy, A. M.) On a boundary value problem for a third-order equation of parabolic-hyperbolic type. (Russian) **82i:35131**

Sanginov, A. See Mulloev, S., (See **82m:34002**)

Semenov, V. N. Asymptotic behavior of an integral arising in the Tricomi problem. (Russian. English summary) **82h:35074**

Shen, Wei Xi See Li, Da Qian; et al., **82h:35073**

Sopuev, A. See Džurav, T. D., **82a:35107**

Terehov, A. N. A boundary value problem for an equation of mixed type. (Russian) **82d:35070**

Unique solvability of a problem for an equation of mixed type. (Russian) **82h:35075**

Teut, O. M. A boundary value problem with constant coefficients for a system of two equations of mixed-composite type. (Russian) **82h:35076**

Tursynbekov, O. Š. An inverse problem for an equation of mixed type. (Russian) **82d:35071**

Usanetsvili, M. A. A mixed boundary value problem for the equation $y''u_{xx} + u_{yy} = 0$. (Russian. Georgian and English summaries) **82h:35077**

Volkodavov, V. F. See Fedorov, Ju. I., **82f:35133**

Vragov, V. N. Formulation and solvability of boundary value problems for higher-order equations of mixed-composite type. (Russian) **82a:35078**

Yu, Wen Ci See Li, Da Qian; et al., **82h:35073**

Zueva, R. A. An analogue of the Dirichlet problem for a multidimensional quasilinear equation of mixed-composite type. (Russian) **82g:35082**

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Fung, Kee Ying Shock wave formation at a caustic. **(82d:76061)**

Lauckau, Eberhard Integraloperatoren für Differentialgleichungen gemischten Typs mit drei unabhängigen Veränderlichen. **(82e:35018)**

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Luk'janov, A. T. (with Neronov, V. S.) ★Принцип максимума для одномерных параболическо-гиперболических систем. (Russian) [A maximum principle for one-dimensional parabolic-hyperbolic systems] **(82b:49029)**

Lykov, N. Ja. Solution of boundary value problems for a nonlinear equation of hyperbolic type. II. (Russian) **(82f:35130)**

Manwell, A. R. ★The Tricomi equation with applications to the theory of plane transonic flow. **(82e:76039)**

Neronov, V. S. See Luk'janov, A. T., **(82b:49029)**

Nuraboev, M. Boundary problems for a first-order system with lowest terms. (Russian. Turkmen summary) **(82j:35031)**

35Nxx Overdetermined systems [See also 58G05, 58G07, 58Hxx.]

35N05 Constant coefficients

secondary classifications:

Krantz, Steven G. Finite type conditions and elliptic boundary value problems. **(82h:32032)**

35N10 Variable coefficients, general

Mihailov, L. G. Some overdetermined systems of partial differential equations. (Russian) **82m:35111**

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secondary classifications:

Schulze, Bert-Wolfgang Adjungierte elliptischer Randwert-Probleme und Anwendungen auf über- und unterbestimmte Systeme. **(82f:58084)**

Zahirov, M. The method of integrating multipliers in the theory of general quasiconformal mappings. (Russian) **(82d:30020)**

35N15 $\bar{\partial}$ -Neumann problem and generalizations; formal complexes [See also 32Fxx and 58G05.]

Geller, Daryl The Laplacian and the Kohn Laplacian for the sphere. **82i:35132**

Grigis, Alain Propagation des singularités au bord d'ouverts de \mathbb{C}^n . **82j:35108**

Landucci, Mario Solutions with precise compact support of $\bar{\partial}u=f$. (French summary) **82f:35139**

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Extendability of proper holomorphic mappings and global analytic hypoellipticity of the $\bar{\partial}$ -Neumann problem. **(82h:32046)**

Bogness, Al Kernels for the local solvability of the tangential Cauchy-Riemann equations. **(82j:32045)**

Kernels for the tangential Cauchy-Riemann equations. **(82b:32030)**

Catlin, David Necessary conditions for subellipticity and hypoellipticity for the $\bar{\partial}$ -Neumann problem on pseudoconvex domains. **(82j:35038)**

Charpentier, Philippe Formules explicites pour les solutions minimales de l'équation $\bar{\partial}u=f$ dans la boule et dans le polydisque de \mathbb{C}^n . **(82j:32009)**

Colombeau, Jean-François (with Perrot, B.) The $\bar{\partial}$ equation in DFN spaces. **(82c:32019)**

D'Angelo, John P. Subelliptic estimates and failure of semicontinuity for orders of contact. **(82g:32022)**

Derridj, M. (with Fornæss, J. E.) Subelliptic estimate for the $\bar{\partial}$ -Neumann problem. **(82h:32047)**

Favilli, Franco Remarks on the local regularity of the $\bar{\partial}$ -problem. (Italian summary) **(82j:32041)**

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Hatrup, Dieter ★Der $\bar{\partial}$ -Operator auf Produkten streng pseudokonvexer Gebiete.

(German) [The $\bar{\partial}$ -operator on products of strictly pseudoconvex domains] **(82b:32005)**

Henkin, G. M. Solution des équations de Cauchy-Riemann tangentielle sur des variétés de Cauchy-Riemann q -concaves. (English summary) **(82b:32031)**

Hortmann, Michael Globale holomorphe Kerne zur Lösung der Cauchy-Riemannschen Differentialgleichungen. (English summary) **(82j:32042)**

Kohn, J. J. Boundary regularity of $\bar{\partial}$. **(82j:32043)**

Landucci, Mario Solutions with "precise" compact support of the $\bar{\partial}$ -problem in strictly pseudoconvex domains and some consequences. (Italian summary) **(82j:32044)**

Lieb, Ingo L'opérateur $\bar{\partial}$ sur une variété q -concave. **(82i:32044)**

Métivier, Guy Analytic hypoellipticity for operators with multiple characteristics. **(82g:35030)**

Perrot, B. See Colombeau, Jean-François, **(82c:32019)**

Sibony, Nessim Un exemple de domaine pseudoconvexe régulier où l'équation $\bar{\partial}u=f$ n'admet pas de solution bornée pour f bornée. **(82c:32020)**

Vasilescu, F.-H. Special perturbations of the $\bar{\partial}$ -operators. **(82e:47023)**

The stability of the Euler characteristic for Hilbert complexes. **(82c:32022)**

35N99 None of the above, but in this section

Ragimov, M. B. Overdetermined systems of partial differential equations in a Banach algebra. (Russian) **82f:35140**

35Pxx Spectral theory and eigenvalue problems [See also 47Axx, 47Bxx, 47F05.]

35P05 General spectral theory

Akopian, G. S. Spectral properties of a pencil of differential operators in a space of vector-valued functions. (Russian. Armenian summary) **82a:35079**

Ben-Artzi, Matania On the absolute continuity of Schrödinger operators with spherically symmetric, long-range potentials. I, II. **82g:35083**

Brown, K. J. (with Lin, S. S.) On the existence of positive eigenfunctions for an eigenvalue problem with indefinite weight function. **82a:35080**

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On the spectra of Schrödinger operators with a complex potential. **82g:35085**

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Girko, V. L. (with Vinogradskaja, A. V.) Control of the spectrum of certain unbounded differential operators. (Russian. English summary) **82m:35112**

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Klevešhin, Ju. A. (with Frolov, N. N.) Selfadjointness of the infinite-dimensional Schrödinger operator with cylindrical potential. (Russian) **82i:35133**

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Ševčenko, V. I. On the spectrum of nonselfadjoint elliptic systems with singular coefficients. (Russian) **82j:35111**

Simader, Christian G. See Leinfelder, Herbert, **82d:35073**

Simon, Barry Spectrum and continuum eigenfunctions of Schrödinger operators. (Russian) **82h:35079**

Skriganov, M. M. Finiteness of the number of lacunae in the spectrum of a multidimensional polyharmonic operator with periodic potential. (Russian) **82f:35142**
General properties of the spectrum of differential and pseudodifferential operators with periodic coefficients and some problems of the geometry of numbers. (Russian) **82d:35074**

Tamura, Hideo Spectral analysis for perturbed Laplace operators in cylindrical domains. **82m:35113**

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Vinogradskaja, A. V. See Girko, V. L., **82m:35112**

Weber, Albin Über das wesentliche Spektrum des gestörten polyharmonischen Operators. II. **82d:35075**

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Colgen, Rainer Invariance of essential spectra. (Russian) **82f:47006**

Combes, J. M. (with Seiler, R.) Spectral properties of atomic and molecular systems. (Russian) **82k:81078**

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Evans, W. D. See Edmunds, David E., **82c:47060**

Fam Loi Vu An inverse nonstationary scattering problem for the perturbed equation of a string on the whole axis. (Russian) **82a:35057**

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Gabov, S. A. Spectrum and bases of eigenfunctions of a problem of acoustic oscillations of rotating fluid. (Russian) **82h:76076**

Garipov, R. M. The spectrum of the Schrödinger operator of molecules. (Russian) **82k:81096**

Gazeau, J.-P. Technique Sturmienne pour le spectre discret de l'équation de Schrödinger. (English summary) **82d:81031**

Gorbatuk, V. I. Boundary value problems for elliptic differential equations. (Russian. English summary) **82h:35030**

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Jafaev, D. R. On "eigenfunctions" of a time-dependent Schrödinger equation. (Russian. English summary) **82h:81017**

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Korepin, V. E. The mass spectrum and the S-matrix of the massive Thirring model in the repulsive case. (Russian) **82e:81032**

Lakaev, S. N. Discrete spectrum and resonances of the one-dimensional Schrödinger operator for small coupling constants. (Russian. English summary) **82c:81029**

Levitin, B. M. (with Otelbaev, M. O.) Conditions for selfadjointness of the Schrödinger and Dirac operators. (Russian) **82d:47034**

Mourre, Eric Absence of singular, continuous spectrum for certain selfadjoint operators. (Russian) **82c:47030**

Najman, B. Spectral properties of the operators of Klein-Gordon type. (Serbo-Croatian summary) **82h:47042**

Nenciu, A. (with Nenciu, G.) The existence of energy gaps for three-dimensional systems without long-range order. (Russian) **82d:81120**

Nenciu, G. See Nenciu, A., **82d:81120**

Otelbaev, M. O. See Levitan, B. M., **82m:47034**

Paquet, Luc Méthode de séparation des variables et calcul de spectre d'opérateurs sur les formes différentielles. (English summary) **82e:58099**

Méthode de séparation des variables et calcul du spectre d'opérateurs sur les formes différentielles. (English summary) **82e:58100**

Romanko, V. K. Conjugation problems for some partial differential equations. (Russian) **82d:35035a**

The conjugation problem for operator-differential equations. (Russian) **82d:35035b**

Seiler, R. See Combes, J. M., **82k:81078**

Simons, Jack See Donnelly, Robert A., **82h:81141**

Svendsen, E. C. The effect of submanifolds upon essential selfadjointness and deficiency indices. (Russian) **82b:47082**

Tanikawa, Masao The spectrum of the Laplacian of a Z_2 -invariant domain. (Russian) **82c:58059**

Vugal'ter, S. A. (with Zislin, G. M.) The discrete spectrum of many-particle quantum systems which have no stable subsystems. II. (Russian) **82d:81027**

Zislin, G. M. See Vugal'ter, S. A., **82d:81027**

35P10 Completeness of eigenfunctions, eigenfunction expansions

Asurov, R. R. On conditions for being a basis in $L_p[\mathbb{R}^n]$ of the Riesz means of spectral expansions. (Russian) **82k:35085**

Bubnov, B. A. Completeness of a system of eigenfunctions of the first boundary value problem for a class of elliptic equations. (Russian) **82a:35081**

Faierman, Melvin (with Knowles, Ian W.) Nonmodal eigenfunction expansions. **82j:35112**

Gabov, S. A. Completeness and the property of being a basis for a system of

eigenfunctions of a problem occurring in the theory of tidal oscillations. (Russian) **82a:35082**

Galic, Mihailo Summability of the expansion of a function of class L^2 in the eigenfunctions of the Laplace operator. (Serbo-Croatian. English summary) **82a:35083**

Gerdžikov, V. S. (with Kulish, P. P.) Expansion in "squares" of eigenfunctions of a matrix linear system. (Russian) **82h:35080**

Jóó, István Some applications of a theorem of S. Banach. (Russian) **82f:35143**

Knowles, Ian W. See Faierman, Melvin, **82j:35112**

Kulish, P. P. See Gerdžikov, V. S., **82h:35080**

Magerramov, A. M. Expansion in eigenfunctions of a differential operator with a multiple continuous spectrum. (Russian. Azerbaijani and English summaries) **82h:35081**

Maravić, Manojlo ★Summability of the expansion in eigenfunctions of the Laplace operator in n -dimensional space. (Serbo-Croatian) **82h:35136**

Müller-Pfeiffer, Erich (with Staudte, J.) Integral theorems for eigenfunctions of second-order elliptic differential operators. **82h:35082**

Sazonov, A. Ju. The convergence of bilinear series consisting of eigenfunctions of singular elliptic operators. (Russian) **82c:35060**

Sozonov, V. G. Uniform convergence and Riesz summability of spectral expansions. (Russian) **82k:35086**

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Sučkov, M. V. The localization principle for the Laplace operator with piecewise constant coefficients on the surface of discontinuity of coefficients. (Russian) **82c:35051**

Vagabov, A. I. Uniform convergence of multiple Fourier series in the principal functions of differential operators. (Russian. Azerbaijani and English summaries) **82h:35087**

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Folland, G. B. Spectral analysis of a nonselfadjoint differential operator. (Russian) **82m:34021**

Gilliam, David S. Eigenfunction expansions for the equations of crystal optics in a half-space. (Russian) **82h:78003**

Gregory, R. D. The traction boundary value problem for the elastostatic semi-infinite strip; existence of solution, and completeness of the Papkovitch-Fadle eigenfunctions. (Russian) **82c:73009**

Joseph, Daniel D. A new separation of variables theory for problems of Stokes flow and elasticity. (Russian) **82a:76024**

Naghdi, A. K. Closed form eigenfunctions of Laplace's equation in multiply connected regions and applications. (Russian) **82h:35043**

Šubin, M. A. The spectrum and its distribution function for a transversally elliptic operator. (Russian) **82h:58050**

Terras, Rihō Normal modes for Green's functions and the method of theta functions. (Russian) **82c:82019**

Wilcox, Calvin H. Theory of Bloch waves. (Russian) **82h:82068**

35P15 Estimation of eigenvalues, upper and lower bounds

Chiti, Giuseppe Inequalities for the first three membrane eigenvalues. (Italian summary) **82g:35087**

Croke, Christopher B. The first eigenvalue of the Laplacian for plane domains. (Russian) **82c:35061**

Hile, G. N. (with Protter, M. H.) Inequalities for eigenvalues of the Laplacian. **82c:35052**

Levine, Howard A. On the positive spectrum of Schrödinger operators with long range potentials. (See **82k:34002**)

Protter, M. H. A lower bound for the fundamental frequency of a convex region. (Russian) **82h:35113**

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Shimakura, Norio Stabilité locale de la première valeur propre du laplacien pour le problème de Dirichlet. (English summary) **82f:35144**

Skūpas, Antanas Distribution of the eigenvalues of a differential operator. (Russian. Lithuanian and English summaries) **82j:35114**

Sperner, Emanuel, Jr. Spherical symmetrization and eigenvalue estimates. **82c:35062**

Trudinger, Neil S. On the first eigenvalue of nonuniformly elliptic boundary value problems. **82h:35114**

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Bareket, Miriam On the convexity of the sum of the first eigenvalues of operators depending on a real parameter. (German summary) **82m:49058**

Bourguignon, Jean-Pierre Première valeur propre du laplacien et volume des sphères riemanniennes. (Russian) **82j:58108**

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Murtazin, H. H. Asymptotic estimates of the resolvent and of solutions of elliptic equations. (Russian) **82h:34069**

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Saiček, A. I. Eigenvalue statistics of a one-dimensional randomly inhomogeneous boundary value problem. (Russian) **82c:82018**

35P20 Asymptotic distribution of eigenvalues and eigenfunctions

Asurov, R. R. (with Pulatov, A. K.) Asymptotic behavior of the spectral function of an elliptic operator with constant coefficients. (Russian) **82c:35063**

- Conditions for localization of spectral decompositions corresponding to elliptic operators with constant coefficients. (Russian) **82b:35138**
- Babik, V. M. The Hadamard method and asymptotic behavior of the spectral function of a second-order differential operator. (Russian) **82b:35139**
- Birman, M. Š. (with Solomjak, M. Z.) Asymptotic behavior of the spectrum of variational problems on solutions of elliptic equations. (Russian) **82b:35115**
(with Solomjak, M. Z.) Asymptotic behavior of the spectrum of variational problems on solutions of elliptic equations in unbounded domains. (Russian) **82a:35084**
- Chazarain, Jacques Comportement semi classique du spectre d'un Hamiltonien quantique. **82b:35116**
Sur le comportement semi classique du spectre et de l'amplitude de diffusion d'un Hamiltonien quantique. **82j:35115**
- Colin de Verdière, Yves Une formule de traces pour l'opérateur de Schrödinger dans \mathbb{R}^3 . **82g:35088**
- Fleckinger-Pellé, Jacqueline Estimation des valeurs propres d'opérateurs elliptiques sur des ouverts non bornés. (English summary) **82j:35145**
Asymptotic distribution of eigenvalues of elliptic operators on unbounded domains. **82j:35146**
Répartition des valeurs propres d'opérateurs de type Schrödinger. (English summary) **82b:35117**
- Friedman, Avner Erratum: "The asymptotic behavior of the first real eigenvalue of a second order elliptic operator with a small parameter in the highest derivatives" [Indiana Univ. Math. J. 22 (1972/73), 1005-1015; MR 47 #9088]. **82b:35118**
- Haitov, A. Distribution of eigenvalues of the Laplace operator. (Russian) **82c:35053**
- Heffler, Bernard (with Robert, Didier) Comportement asymptotique précisé du spectre d'opérateurs globalement elliptiques dans \mathbb{R}^n . (English summary) **82b:35119**
- Hmel'nickii, P. E. Some asymptotic properties of the spectrum of regular elliptic boundary value problems. (Russian) **82a:35085**
- Hörmander, Lars On the asymptotic distribution of the eigenvalues of pseudodifferential operators in \mathbb{R}^n . **82a:35140**
- Ivrii, V. Ja. Exact spectral asymptotics for the Laplace-Beltrami operator under general elliptic boundary conditions. (Russian) **82a:35088**
- Jensen, Arne Schrödinger operators in the low energy limit: some recent results in $L^2(\mathbb{R}^n)$. (See **82b:34002**)
- Kogan, Ju. V. Trace formulas for pseudodifferential operators on the circle. (Russian. English summary) **82b:35141**
- Komarenko, O. N. Asymptotic expansion of eigenfunctions of a problem with a parameter in the boundary conditions in a neighborhood of the angular boundary points. (Russian) **82a:35086**
- Koženikov, A. N. Remainder estimate for spectral asymptotics and complex powers of Douglas-Nirenberg elliptic systems. (Russian) **82b:35142**
- Menikoff, A. (with Sjöstrand, Johannes) The eigenvalues of hypoelliptic operators. **82b:35120**
(with Sjöstrand, Johannes) On the eigenvalues of a class of hypoelliptic operators. II. **82m:35114**
(with Sjöstrand, Johannes) The eigenvalues of hypoelliptic operators. III. The nonseminonbounded case. **82m:35115**
- Molčanov, S. A. The local structure of the spectrum of the one-dimensional Schrödinger operator. **82d:35076**
- Newell, Gordon F. Asymptotic distribution of eigenvalues for the multidimensional Schrödinger equation. **82c:35054**
- Pham Thi Lai Meilleures estimations asymptotiques des restes de la fonction spectrale et des valeurs propres relatives au Laplacien. **82g:35089**
- Pinsky, Mark A. The eigenvalues of an equilateral triangle. **82d:35077**
- Polatov, A. K. See Ašurov, R. R., **82c:35063**
- Robert, Didier See Heffler, Bernard, **82b:35119**
- Sjöstrand, Johannes On the eigenvalues of a class of hypoelliptic operators. IV. (French summary) **82m:35116**
See also Menikoff, A., **82b:35120**; **82m:35114** and **82m:35115**
- Smith, Lance The asymptotics of the heat equation for a boundary value problem. **82m:35117**
- Solomjak, M. Z. See Birman, M. Š., **82a:35084** and **82b:35115**
- Suvorčenkova, G. A. Asymptotic behavior of a spectral function of a first-order differential equation with operator coefficients. (Russian) **82f:35147**
- Tašćijan, G. M. Asymptotic behavior of the spectrum of elliptic differential equations with a weak polynomial degeneracy on the boundary of the domain. (Russian) **82a:35087**
- Vasil'ev, D. G. Asymptotic behavior of the distribution function of a spectrum of pseudodifferential operators with parameters. (Russian) **82b:35121**
- secondary classifications:
- Bassotti Rizza, Lucilla Numerical verification of the classical asymptotic formula of H. Weyl for the eigenvalues of elasticity. (Italian. English summary) **82d:49041**
- Baušev, V. S. (with Viliunov, V. N.; Timohin, A. M.) Stability of stationary solutions of the system of equations of the combustion theory. (82b:80004)
- Bérard, Pierre H. (with Besson, G.) Spectres et groupes cristalllographiques. II. Domaines sphériques. (82e:58076)
- Spectres et groupes cristalllographiques. I. Domaines euclidiens. (82e:58074)
- Besson, G. See Bérard, Pierre H., (82e:58076)
- Birman, M. Š. Quasiclassical spectral asymptotic behavior of a class of integral operators. (Russian. English summary) (82c:47083)
- Brining, Jochen Invariant eigenfunctions of the Laplacian and their asymptotic distribution. (82m:58055)
- Chavel, Isaac (with Feldman, Edgar A.) Spectra of manifolds with small handles. (82j:58110)
- Chazarain, Jacques Spectre d'un hamiltonien quantique et mécanique classique. (82d:58064)
- Diamindžia, R. G. Asymptotic behavior of eigenfunctions of some boundary value problems of an oscillation of the plane couple-stress theory of elasticity. (Russian. Georgian and English summaries) (82j:73005)
- Dlubek, Helga (with Friedrich, Thomas) Spektraleigenschaften des Dirac-Operators—die Fundamentallösung seiner Wärmeleitungsgleichung und die Asymptotenentwicklung der Zeta-Funktion. (82g:58087)
- Fefferman, Charles (with Phong, D. H.) On the asymptotic eigenvalue distribution of a pseudodifferential operator. (82b:35101)
- Feldman, Edgar A. See Chavel, Isaac, (82j:58110)
- Friedrich, Thomas See Dlubek, Helga, (82g:58087)
- Grosse, H. Quasiclassical estimates on moments of the energy levels. (82g:81017)
- Guillemin, Victor A Szegő-type theorem for symmetric spaces. (82c:43010)
- Some microlocal aspects of analysis on compact symmetric spaces. (82c:43011)
- Hoffmann-Ostenhof, Maria (with Seiler, R.) Cusp conditions for eigenfunctions of n -electron systems. (82b:81023)
- Ivrii, V. Ja. The second term of the spectral asymptotics for a Laplace-Beltrami operator on manifolds with boundary. (Russian) (82m:58057)
- Karol', A. I. On the ζ -function of a degenerate elliptic Dirichlet boundary value problem. (Russian) (82m:35055)
- Klaus, Martin Some remarks on double-wells in one and three dimensions. (82i:81026)
- Macaev, V. I. See Markus, A. S., (82f:47034)
- Markus, A. S. (with Macaev, V. I.) Asymptotic behavior of the spectrum of close-to-normal operators. (Russian) (82f:47034)
- Melrose, R. B. Weyl's conjecture for manifolds with concave boundary. (82b:58101)
- Phong, D. H. See Fefferman, Charles, (82b:35101)
- Pu, Fu Ke Density of states, Poisson's formula of summation and Walfisz's formula. (82d:82014)
- Randol, Burton A Dirichlet series of eigenvalue type with applications to asymptotic estimates. (82j:10082)
- Seiler, R. See Hoffmann-Ostenhof, Maria, (82b:81023)
- Timohin, A. M. See Baušev, V. S.; et al., (82b:80004)
- Viliunov, V. N. See Baušev, V. S.; et al., (82b:80004)
- Widom, Harold Asymptotics of compressions to spectral subspaces of the Laplacian. (82c:58101)
- 35P25 Scattering theory [See also 47A40.]
- Ben-Artzi, Matania (with Devinatz, Allen) Spectral and scattering theory for the adiabatic oscillator and related potentials. **82a:35088a**
(with Devinatz, Allen) Erratum: "Spectral and scattering theory for the adiabatic oscillator and related potentials". **82a:35088b**
- Birman, M. Š. (with Jafaev, D. R.) Asymptotics of the spectrum of the S -matrix in potential scattering. (Russian) **82j:35116**
- Chandler, Colston (with Gibson, A. G.) A two-Hilbert-space formulation of multichannel scattering theory. (See **82b:81117**)
- Combes, J. M. (with Weder, Ricardo) Spectral theory and unbounded obstacle scattering. (See **82b:34002**)
- Cooper, Jeffery (with Strauss, Walter A.) Representations of the scattering operator for moving obstacles. **82c:35055**
(with Strauss, Walter A.) Holomorphic extension of the scattering amplitude for moving obstacles. **82f:35148**
- Devinatz, Allen Schrödinger operators with singular potentials. **82c:35056**
See also Ben-Artzi, Matania, **82a:35088**
- Gibson, A. G. See Chandler, Colston, (See **82b:81117**)
- Ginibre, Jean (with Velo, Giorgio) On a class of nonlinear Schrödinger equations. III. Special theories in dimensions 1, 2 and 3. **82c:35059**
(with Velo, Giorgio) On a class of nonlinear Schrödinger equations. I. The Cauchy problem, general case. **82c:35057**
(with Velo, Giorgio) On a class of nonlinear Schrödinger equations. II. Scattering theory, general case. **82c:35058**
- Heffler, Bernard (with Robert, Didier) Comportement semi-classique du spectre des hamiltoniens quantiques hypoelliptiques. (English summary) **82i:35143**
- Howland, James S. Born series and scattering by time-dependent potentials. **82d:35078**
- Ikebe, Teruo Remarks on nonelliptic stationary wave propagation problems. **82j:35117**
- Jorio, Rafael José, Jr. Perturbations of $-\Delta$ that grow at infinity in certain directions. **82c:35060**
- Jafaev, D. R. On the break-down of completeness of wave operators in potential scattering. **82j:35118**
Wave operators for the Schrödinger equation. (Russian) **82j:35119**
See also Birman, M. Š., **82j:35116**
- Kitada, Hitoshi Correction to: "Asymptotic behavior of some oscillatory integrals" [J. Math. Soc. Japan 31 (1979), no. 1, 127-140; MR 80m:35061]. **82f:35149**
- Moses, Harry E. Exact solutions for the three-dimensional Schrödinger equation with quasireal potentials obtained from a three-dimensional Gel'fand-Levitan equation. Examples of totally reflectionless scattering. (See **82b:81117**)
- Murata, Minoru Characterizations of the ranges of wave operators for symmetric systems and an application. **82j:35120**
- Najman, B. Trace class perturbations and scattering theory for the equations of Klein-Gordon type. (Serbo-Croatian summary) **82b:35122**
- Petkov, Vesselin Asymptotics of the scattering amplitude for nonconvex bodies. **82d:35079**
Représentation de l'opérateur de diffusion pour des systèmes hyperboliques dissipatifs. (English summary) **82a:35089**
High frequency asymptotics of the scattering amplitude for nonconvex bodies. **82c:35061**
(with Popov, Georgi St.) Asymptotique de la phase de diffusion pour des domaines non convexes. (English summary) **82b:35123**
- Popov, Georgi St. See Petkov, Vesselin, **82b:35123**
- Ralston, James V. Propagation of singularities and the scattering matrix. **82j:35121**
- Robert, Didier See Heffler, Bernard, **82b:35143**
- Saenz, Albert W. Wave operators for multichannel long-range scattering. (See **82b:81117**)

- Saitō, Yoshimi On the S -matrix for Schrödinger operators with long-range potentials. (82b:35083)
- Sigal, I. M. Mathematical questions of quantum mechanics of many-body systems. (See 82b:81117)
- Soga, Hideo Oscillatory integrals with degenerate stationary points and their application to the scattering theory. (82b:35144)
- Strauss, Walter A. See Cooper, Jeffery, 82c:35055 and Cooper, Jeffery, 82b:35148
- Tamura, Hideo The principle of limiting absorption for uniformly propagative systems with perturbations of long-range class. (82b:35064)
- Tayoshi, Takao Wave operators in the scattering problem related to nonfinite obstacles. (82b:35145)
- Velo, Giorgio See Ginibre, Jean, 82c:35057; 82c:35058 and 82c:35059
- Weder, Ricardo See Combes, J. M., (See 82b:34002)

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- Avron, Joseph E. (with Simon, Barry) A counterexample to the paramagnetic conjecture. (82b:82003)
- Balslev, Erik Analytic scattering theory for many-body systems below the smallest three-body threshold. (82d:81121)
- Bardos, Claude (with Guillot, Jean-Claude; Ralston, James V.) Relation de Poisson pour l'équation des ondes dans un ouvert non borné. (82f:35104)
- Bourgeois, Brian See Dollard, John D., (See 82b:81117)
- Combes, J. M. Recent developments in quantum scattering theory. (82b:81076)
- Coudray, Christiane On transparent potentials: a Born approximation study. (82b:81101)
- Davies, Edward Brian Energy dependence of the scattering operator. (82d:81131)
- Derem, A. Théorie de la diffusion des ondes acoustiques par des corps cylindriques immergés: aspects généraux. (English summary) (82b:76054)
- (DeSanto, John A.) See Mathematical methods and applications of scattering theory, (82b:81117)
- Dollard, John D. (with Bourgeois, Brian) Green and Lanford revisited. (See 82b:81117)
- El Mabrouk, Mongi Théorie spectrale et théorie de la diffusion en thermo-élasticité. (English summary) (82c:47010)
- Friedlander, F. G. Radiation fields and hyperbolic scattering theory. (82f:35112)
- Ginibre, Jean (with Velo, Giorgio) Existence of solutions and scattering theory for the nonlinear Schrödinger equation. (82c:35017)
- (with Velo, Giorgio) On a class of nonlinear Schrödinger equations with nonlocal interaction. (82c:35018)
- Guillot, Jean-Claude See Bardos, Claude; et al., (82f:35104)
- Hachem, Ghias Sur les fréquences de diffusion (scattering) d'un corps élastique couplé avec l'air. (English summary) (82f:73029)
- Hecht, K. T. (with Reske, E. J.; Seligman, Thomas H.; Zahn, W.) Spectroscopic amplitudes for complex cluster systems. (82b:81135)
- Kalos, M. H. See Zabolitzky, J. G., (82b:81137)
- Kandrup, Henry E. Properties of solutions to integral master equations for closed and open stellar systems. (82b:85005)
- Kitanin, A. L. See Vasil'ev, A. M., (82b:81034)
- Kleinman, R. E. Some applications of functional analysis in classical scattering. (See 82b:81117)
- Majda, Andrew (with Ralston, James V.) Geometry in the scattering phase. (82b:58100)
- Merkur'ev, S. P. On the three-body Coulomb scattering problem. (82c:81048)
- Mourre, Eric Link between the geometrical and the spectral transformation approaches in scattering theory. (82d:81127)
- Ralston, James V. See Majda, Andrew, (82b:58100) and Bardos, Claude; et al., (82f:35104)
- Reske, E. J. See Hecht, K. T.; et al., (82b:81135)
- (Sáenz, Albert W.) See Mathematical methods and applications of scattering theory, (82b:81117)
- Schechter, Martin Spectral and scattering theory for propagative systems. (See 82b:34002)
- Seligman, Thomas H. See Hecht, K. T.; et al., (82b:81135)
- Simon, Barry See Avron, Joseph E., (82b:82003)
- Strauss, Walter A. Everywhere defined wave operators. (82c:47078)
- Vakulenko, A. F. Unitary regularization in the many-particle scattering problem. (Russian) (82b:81109)
- Vasil'ev, A. M. (with Kitanin, A. L.) Periodic perturbation of the degenerate discrete level. (Russian. English summary) (82b:81034)
- Velo, Giorgio See Ginibre, Jean, (82c:35017) and (82c:35018)
- Wilcox, Calvin H. The S -matrix and sonar echo structure. (See 82b:81117)
- Yajima, Kenji The quasiclassical limit of quantum scattering theory. II. Long-range scattering. (82c:81049)
- Zabolitzky, J. G. (with Kalos, M. H.) Solution of the four-nucleon Schrödinger equation. (82b:81137)
- (Zachary, Woodford W.) See Mathematical methods and applications of scattering theory, (82b:81117)
- Zahn, W. See Hecht, K. T.; et al., (82b:81135)
- Conference:
 Mathematical Methods and Applications of Scattering Theory ★Mathematical methods and applications of scattering theory. (82b:81117)
 Mathematical methods and applications of scattering theory ★Mathematical methods and applications of scattering theory. (82b:81117)
 Scattering theory ★Mathematical methods and applications of scattering theory. (82b:81117)
 Washington, D.C. ★Mathematical methods and applications of scattering theory. (82b:81117)

35P30 Nonlinear eigenvalue problems

- Cerami, Giovanna On the existence of eigenvalues for a nonlinear boundary value problem. (Italian) (82f:35150)

- Dobrohotov, S. Ju. (with Maslov, V. P.) Multidimensional nonlinear spectral boundary value problems and superposition of their asymptotic solutions according to the law of superposition of solitons. (Russian) (82b:35124)
- Maslov, V. P. See Dobrohotov, S. Ju., 82b:35124

secondary classifications:

- Brauer, C. M. (with Nicolaenko, B.) Singular perturbations and free boundary value problems. (82c:35005)
- Hameiri, Eliezer Singular solutions and the continuous spectrum. (82c:76109)
- Kikuchi, Fumio An iteration scheme for a nonlinear eigenvalue problem. (See 82c:73003)
- Lebedev, L. P. On equilibrium of a free nonlinear plate. (82m:73049)
- Lichnerowsky, A. Une méthode de gradient conjugué sur des variétés application à certains problèmes de valeurs propres non linéaires. (English summary) (82b:49041)
- Lobo-Hidalgo, M. See Sánchez-Palencia, Enrique, (82b:35017)
- Nicolaenko, B. See Brauer, C. M., (82c:35005)
- Payne, L. E. Bounds for solutions of a class of quasilinear elliptic boundary value problems in terms of the torsion function. (82j:35064)
- Sánchez-Palencia, Enrique (with Lobo-Hidalgo, M.) Perturbation of spectral properties for a class of stiff problems. (82b:35017)
- Weinstein, Alan D. Nonlinear stabilization of quasimodes. (82d:58016)
- Zhang, Gong Qing Remarks on free boundary problems for the flux equations in plasma physics. (82b:76072)

35P99 None of the above, but in this section

- Eastham, Michael S. P. See Thurlow, Christine R., 82b:35125
- Izmaitov, A. L. Separability of a certain operator. (Russian) (82c:35062)
- Thurlow, Christine R. (with Eastham, Michael S. P.) The existence of eigenvalues of infinite multiplicity for the Schrödinger operator. (82b:35125)
- Vauthier, Jacques Finitude d'espaces d'états liés pour certains systèmes quantiques. (82f:35151)

secondary classifications:

- Amann, Herbert (with Zehnder, Eduard) Nontrivial solutions for a class of nonresonance problems and applications to nonlinear differential equations. (82b:47077)
- Bochenek, Jan Dependence of a differential equation on the first eigenvalue of a suitable problem. (82d:35024)
- Dubrovnik, B. A. (with Novikov, S. P.) Fundamental states in a periodic field. Magnetic Bloch functions and vector bundles. (Russian) (82b:81181)
- Fefferman, Charles (with Phong, D. H.) The uncertainty principle and sharp Garding inequalities. (82j:35140)
- Grossmann, A. (with Hoegh-Krohn, Raphael; Mebkhout, M.) The one particle theory of periodic point interactions. Polymers, monomolecular layers, and crystals. (82i:81022)
- Hoegh-Krohn, Raphael See Grossmann, A.; et al., (82i:81022)
- Johnson, Bruce R. On a connection between radial Schrödinger equations for different power-law potentials. (82c:81018)
- Klaus, Martin (with Simon, Barry) Coupling constant thresholds in nonrelativistic quantum mechanics. I. Short-range two-body case. (82b:81028a)
- (with Simon, Barry) Coupling constant thresholds in nonrelativistic quantum mechanics. II. Two-cluster thresholds in N -body systems. (82b:81028b)
- Lax, Peter D. (with Phillips, Ralph S.) Correction to: "Translation representations for the solution of the non-Euclidean wave equation" [Comm. Pure Appl. Math. 32 (1979), no. 5, 617-667; MR 81a:43013]. (82a:43010)
- Leinfelder, Herbert On the virial theorem in quantum mechanics. (82g:81015)
- Lenoir, Marc (with Martin, Daniel Jean) An application of the principle of limiting absorption to the motions of floating bodies. (82d:76019)
- Martin, Daniel Jean See Lenoir, Marc, (82d:76019)
- Mebkhout, M. See Grossmann, A.; et al., (82i:81022)
- Molotkov, I. A. (with Starkov, A. S.) Local resonance interaction of normal waves in a system containing connected waveguides. (Russian) (82d:78024)
- Newman, C. M. (with Schulman, Lawrence S.) Complex free energies and metastable lifetimes. (82b:82010)
- Novikov, S. P. See Dubrovnik, B. A., (82b:81181)
- Phillips, Ralph S. See Lax, Peter D., (82a:43010)
- Phong, D. H. See Fefferman, Charles, (82j:35140)
- Pietsch, Albrecht Über die Verteilung von Fourierkoeffizienten und Eigenwerten—nicht nur ein historischer Überblick. (Russian and English summaries) (82c:47022)
- Rofe-Beketov, F. S. Perturbations and Friedrichs extensions of semibounded operators on variable domains. (Russian) (82a:47013)
- Schenk, Dieter Zur Resolvente des mehrdimensionalen Schrödinger-Operators. (82b:81119)
- Schulman, Lawrence S. See Newman, C. M., (82b:82010)
- Seeley, R. An estimate near the boundary for the spectral function of the Laplace operator. (82b:58097)
- Šestopalov, Ju. V. Properties of the spectrum of a class of nonselfadjoint boundary value problems for sets of Helmholtz equations. (Russian) (82f:35063)
- Simon, Barry Large time behavior of the L^p norm of Schrödinger semigroups. (82b:81027)
- See also Klaus, Martin, (82b:81028a) and (82b:81028b)
- Simon, Udo Estimates for eigenvalues of the Laplacian on compact Riemannian manifolds. (See 82b:34002)
- Starkov, A. S. See Molotkov, I. A., (82d:78024)
- Zehnder, Eduard See Amann, Herbert, (82b:47077)

35Qxx Special equations and problems [See also 35J05, 35K05, 35L05.]

35Q05 Euler-Poisson-Darboux equation and generalizations

- Asral, B. On the regular Cauchy problems for the Euler-Poisson-Darboux equations and

- the method of ascent. **82m:35118**
- Boltsev, K. S. See Radzhabov, N., (See **82m:34002**)
- Bragg, L. R. The radial wave and Euler-Poisson-Darboux equations with singular data. **82g:35090**
- Čekmar, T. V. The Dirichlet problem for a system of Euler-Poisson-Darboux equations in a circle with its center on the line of degeneracy and in its parts. (Russian) **82c:35064**
- The Dirichlet problem for a system of Euler-Poisson-Darboux equations in a half-plane and strip perpendicular to the line of degeneracy. (Russian) **82b:35126**
- Friedlander, F. G. Note on a singular initial-boundary value problem. **82j:35122**
- Kelings, John A. See Staples, Phillip O., **82b:35127**
- Lomonosova, T. B. Uniqueness of the solution of a problem for the Euler-Darboux equation with parameters of various signs. (Russian) (See **82c:35004**)
- Radzhabov, N. (with Boltsev, K. S.) The solution of boundary value problems for the Euler-Poisson-Darboux equation in the case of a strip. (Russian) (See **82m:34002**)
- Staples, Phillip O. (with Kelings, John A.) A characterization of solutions to a perturbed Laplace equation. **82b:35127**
- secondary classifications:
- Tomantschger, Kurt Walter ★Bergman-Operatoren gewisser formal-hyperbolischer Differentialgleichungen. (German) [Bergman operators of certain formally hyperbolic differential equations] (**82c:35017**)
- 35Q10** Navier-Stokes equations [See also **76D05**.]
- Arsen'ev, A. A. Statistical solutions of a system of Navier-Stokes equations. (Russian) **82c:35146**
- Babenko, K. I. Some remarks on bifurcation of solutions of the Navier-Stokes equations. (Russian) **82c:35089**
- Beirão da Veiga, Hugo. On an Euler-type equation in hydrodynamics. **82c:35063**
- Bemelmans, J. $C^{0,\alpha}$ -semigroups for flows past obstacles and for flows with capillary surfaces. **82c:35064**
- Bogovskii, M. E. On the L_p -theory of the Navier-Stokes system for unbounded domains with noncompact boundaries. (Russian) **82f:35152**
- Elcrat, Alan R. Spatial decay for the Navier-Stokes equations. **82m:35119**
- Foias, Ciprian (with Temam, Roger) Solutions statistiques homogènes des équations de Navier-Stokes. **82m:35120**
- A survey on the functional dynamical system generated by the Navier-Stokes equations. **82c:35065**
- (with Temam, Roger) Homogeneous statistical solutions of Navier-Stokes equations. **82g:35097**
- (with Temam, Roger) Solutions statistiques homogènes des équations de Navier-Stokes. [Homogeneous statistical solutions of Navier-Stokes equations] **82j:35123**
- (with Guillopé, Colette; Temam, Roger) New a priori estimates for Navier-Stokes equations in dimension 3. **82f:35153**
- Fursikov, A. V. See Višik, M. I., **82g:35095**
- Guillopé, Colette. See Foias, Ciprian; et al., **82f:35153**
- Guz', O. M. Representation of solutions of linearized Navier-Stokes equations. (Russian) **82d:35080**
- Joshi, N. E. See Saraykar, R. V., **82f:35155**
- Kato, Hisako. On a property of the space of weak solutions for the Navier-Stokes problem. **82f:35154**
- Komeč, A. I. See Višik, M. I., **82h:35085**
- Ladyženskaja, Olga A. (with Solonnikov, V. A.) Determination of the solutions of stationary boundary value problems in unbounded domains for Navier-Stokes equations having infinite dissipation. (Russian) **82b:35128**
- (with Solonnikov, V. A.; True, Hans) Résolution des équations de Stokes et Navier-Stokes dans des tuyaux infinis. (English summary) **82c:35066**
- Lloyd, Stuart P. The infinitesimal group of the Navier-Stokes equations. **82g:35091**
- Ma, Chun Ming. On square-smoothability and uniqueness questions concerning nonstationary Stokes flow in an exterior domain. **82d:35081**
- Miyakawa, Tetsuro. The L^p approach to the Navier-Stokes equations with the Neumann boundary condition. **82c:35067**
- Ng, K. Y. K. Solution of Navier-Stokes equations by goal programming. **82b:35129**
- Ōtani, Mitsuharu (with Yamada, Yoshio) On the Navier-Stokes equations in noncylindrical domains: an approach by the subdifferential operator theory. **82g:35092**
- Piskorek, Adam (with Zabrodzki, E.) Über die instationären hydrodynamischen Potentiale. **82c:35147**
- Rosen, Gerald. A remarkable operator version of the Navier-Stokes equation. **82g:35093**
- Saraykar, R. V. (with Joshi, N. E.) Nondissipative hydromagnetic flows: existence and some properties. **82f:35155**
- Saut, Jean-Claude (with Temam, Roger) Generic properties of Navier-Stokes equations: genericity with respect to the boundary values. **82g:35096**
- Siročenko, V. P. On the uniqueness of the solution of some periodic problems for Navier-Stokes equations. (Russian) **82m:35121**
- Smagulov, Š. A variant of the approximation of the Navier-Stokes equations. (Russian) **82g:35094**
- Socolescu, Dan. On one free boundary problem for the stationary Navier-Stokes equations. **82b:35130**
- On some new boundary value problems for the stationary Navier-Stokes equations. **82b:35131**
- Socolescu, Dan. Existenz- und Eindeutigkeitsbeweis für ein freies Randwertproblem für die stationären Navier-Stockesschen Bewegungsgleichungen. (German) **82m:35122**
- Solonnikov, V. A. See Ladyženskaja, Olga A., **82b:35128** and **82c:35066**
- Temam, Roger ★Navier-Stokes equations. **82b:35133**
- Some properties of functional invariant sets for Navier-Stokes equations. **82b:35132**
- See also Foias, Ciprian; et al., **82f:35153**; Saut, Jean-Claude, **82g:35096**; Foias, Ciprian, **82g:35097**; **82j:35123** and **82m:35120**
- (Thomasset, François) See Temam, Roger, **82b:35133**
- Ton, Bui An. Nonstationary Navier-Stokes flows with vanishing viscosity. **82c:35065**
- True, Hans. See Ladyženskaja, Olga A.; et al., **82c:35066**
- Višik, M. I. (with Fursikov, A. V.) ★Математические задачи статистической гидромеханики. (Russian) [Mathematical problems of statistical hydromechanics] **82g:35095**
- (with Komeč, A. I.) Stationary solutions of the stochastic Navier-Stokes equations. **82b:35085**
- Yamada, Yoshio. See Ōtani, Mitsuharu, **82g:35092**
- Zabrodzki, E. See Piskorek, Adam, **82c:35147**
- secondary classifications:
- Bardos, Claude. See Sulem, Catherine; et al., (**82b:76022**)
- Basdevant, Claude. See Sadoury, Robert, (**82i:76049**)
- Beirão da Veiga, Hugo. Recent results on the motion of compressible perfect fluids. (Italian. English summary) (**82i:76060**)
- Bouix, Maurice. Propulsion d'un corps à paroi souple active dans un fluide visqueux. (English summary) (**82b:76030**)
- Chandna, O. P. (with Mishra, Ratan Shanker) Steady plane magnetogasdynamics flow. (**82i:76098**)
- Dridi, Hamadi. Équations de Navier-Stokes dans des cylindres aplatis. Justification de l'analogie de Hele-Shaw. (English summary) [Navier-Stokes equations in flattened cylinders. Justification of the Hele-Shaw analogy] (**82m:76019**)
- Elcrat, Alan R. Uniqueness for time-dependent swirling flows. (**82i:76039**)
- Fasel, Hermann F. Numerical solution of the complete Navier-Stokes equations for the simulation of unsteady flows. (**82d:65079**)
- Frisch, Uriel. See Sulem, Catherine; et al., (**82b:76022**)
- Guz', O. M. On the representation of solutions to the linearized Navier-Stokes equations for a moving liquid. (Russian) (**82j:76061**)
- Hebeker, F.-K. A linear Uzawa algorithm for the steady-state Navier-Stokes problem. (**82c:76031**)
- Kameev, D. A. Hyperbolic limit sets of evolution equations and the Galerkin method. (Russian) (**82c:58080**)
- Kazhiov, A. V. Well-posedness of a nonstationary problem of flow of an ideal fluid through a given region. (Russian) (**82m:76016**)
- Konstantinov, A. A. On the problem of the functional approach to turbulence. (Russian. English summary) (**82i:76045**)
- Lainé, Claudine. Sur les aspects mathématiques de modèles de viscosité de la turbulence en écoulement établi de conduite plane. (English summary) (**82a:76039**)
- Manneville, Paul. Statistical properties of chaotic solutions of a one-dimensional model for phase turbulence. (**82b:76029**)
- Marris, A. W. Remarks on plane universal Navier-Stokes motions. (**82m:76020**)
- Matsumoto, Waichirō. Une remarque sur l'unicité du prolongement des solutions pour les systèmes mixtes de type parabolique et de type elliptique dégénéré. (English summary) (**82c:35044**)
- Meirmanov, A. M. On the substantiation of the hydraulic Boussinesq equation. (Russian) (**82b:76019**)
- Mirabel', A. P. (with Monin, A. S.) Two-dimensional turbulence. (Russian. English summary) (**82i:76047**)
- Mishra, Ratan Shanker. See Chandna, O. P., (**82i:76098**)
- Mjasnikov, V. P. (with Novikov, V. L.; Sazonov, Ju. V.) A direct problem of salt dome modeling. (Russian) (**82b:86007**)
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Kunisch, Karl A semigroup approach to partial differential equations with delay. 82h:35092

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Marinec', T. I. Approximate integration of nonlinear systems with retarded argument containing a polyharmonic operator. (Russian) 82g:35115

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Mokeichev, V. S. Partial differential equations with deviating arguments. (Russian) 82h:35093

Pritula, N. N. Excitation of oscillations in nonlinear systems with distributed parameters and a random deviation with respect to time. (Russian) 82h:35094

Rabinovič, V. S. Differential-difference equations in a half space. (Russian) 82m:35139

Redheffer, Raymond M. (with Walter, Wolfgang) Uniqueness, stability and error estimation for parabolic functional-differential equations. (Russian summary) 82d:35104

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Schumacher, Konrad Travelling-front solutions for integro-differential equations. II. 82i:35180

Sinestrari, Eugenio (with Vernole, Paola) Retarded functional parabolic equations in interpolation spaces. 82a:35094

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Stanković, B. (with Takaci, Đ.) Linear differential equations with coefficients in a field. II. (Serbo-Croatian summary) 82i:35181

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secondary classifications:

Aliev, R. G. Asymptotic behavior of solutions of equations with deviating argument in Hilbert space. (Russian) (82c:34090)

Bruschi, Massimo (with Ragnisco, O.) Nonlinear differential-difference equations, associated Bäcklund transformations and Lax technique. (82j:58060)

Lighthourne, James H., III (with Rankin, Samuel M., III) Global existence for a delay differential equation. (82i:35086)

Marcus, Moshe (with Mizel, Victor J.) Semilinear hereditary hyperbolic systems with nonlocal boundary conditions. II. (82i:35120b)

Mizel, Victor J. See Marcus, Moshe, (82i:35120b)

Ragnisco, O. See Bruschi, Massimo, (82j:58060)

Rankin, Samuel M., III See Lighthourne, James H., III, (82i:35086)

Schuster, Peter (with Sigmund, Karl; Wolff, Robert) Mass action kinetics of self-replication in flow reactors. (82c:92012)

Sigmund, Karl See Schuster, Peter; et al., (82c:92012)

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35R15 Equations on function spaces [See also 58D25.]

Alekseev, A. S. Stability of equilibrium states in function phase spaces in distributed systems. (Russian) 82c:35078

Kovačik, I. M. The representation of solutions of some equations with functional derivatives with the aid of the Wiener integral. (Russian. English summary) 82i:35163

Lascar, Bernard Problèmes de Cauchy hyperboliques en dimension infinie. 82i:35182

Lǐ, Yǔ Chia Applications of the Fourier-Wiener transform to differential equations on infinite-dimensional spaces. I. 82h:35098

Samolilenko, V. G. Second-order elliptic operators with an infinite number of variables. (Russian) 82c:35078

Sokolovskii, V. B. New relations of some problems for equations containing a Lévy-Laplace operator with problems of mathematical physics. (Russian) 82h:35096

Uglanov, A. V. Second-order parabolic differential equations for generalized measures on Hilbert space. (Russian. English summary) 82a:35095

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Berezans'kii, Ju. M. Selfadjoint differential operators acting in spaces of functions of an infinite number of variables. (Russian) (82h:47018)

Selfadjoint operators in spaces of functions with an infinite number of variables. (Russian) (82h:47028)

Frolov, N. N. Selfadjointness of the Schrödinger operator with an infinite number of variables. (Russian) (82h:47023)

See also Klevčhin, Ju. A., (82i:35133)

Klevčhin, Ju. A. (with Frolov, N. N.) Selfadjointness of the infinite-dimensional Schrödinger operator with cylindrical potential. (Russian) (82i:35133)

35R20 Operator equations, general [See also 34Gxx, 47A50, 47H15.]

Bai, Su Hua On the uniqueness of the generalized solution of the Cauchy problem for first-order quasilinear equations with several space variables. (Chinese) 82i:35183

El'borai, Mahmoud M. On the initial value problem for a partial differential equation with operator coefficients. 82h:35148

Kokubei, A. N. Hyperfunction solutions of operator differential equations. (Russian) 82g:35116

secondary classifications:

Hudavardiev, K. I. (with Tahirov, B. O.) Investigation of a weakly generalized solution of a multidimensional mixed problem with general boundary conditions for hyperbolic equations with a nonlinear operator right-hand side. (Russian. Azerbaijani and English summaries) (82g:35068)

Kunisch, Karl (with Schappacher, Wilhelm) Mild and strong solutions for partial differential equations with delay. (82i:34100)

Lakshmikantham, V. (with Leela, S.) Nonlinear differential equations in abstract spaces. (82i:34072)

Leela, S. See Lakshmikantham, V., (82i:34072)

Morosanu, Gheorghe Regularity of solutions of variational inequalities in Hilbert spaces. (82a:47059)

Schappacher, Wilhelm See Kunisch, Karl, (82i:34100)

Tahirov, B. O. See Hudavardiev, K. I., (82g:35068)

35R25 Improperly posed problems

Atahodjaev, M. A. An ill-posed problem for the biharmonic equation. (Russian) 82h:35097

Gorbatuk, V. I. Estimates of the accuracy of an approximate solution for the Cauchy problem for the Laplace equation in an infinite strip. (Russian) 82c:35079

secondary classifications:

- Han, Hou De The finite element method in the family of improperly posed problems. (82m:65091)
- Laurent, M. M. (with Romanov, V. G.; Šišatskii, S. P.) ★Некорректные задачи математической физики и анализа. (Russian) [Ill-posed problems of mathematical physics and analysis] (82g:65003)
- Romanov, V. G. See Laurent, M. M.; et al., (82g:65003)
- Šišatskii, S. P. See Laurent, M. M.; et al., (82g:65003)
- Viglin, E. S. Well-posedness classes of the Cauchy problem for equations with linearly transformed time. (Russian) (82f:35054)
- Zeinalov, I. S. An ill-posed problem for a parabolic system. (Russian. Azerbaijani and English summaries) (82b:35079)
- Application of the contour integral method to the study of ill-posed problems for second-order parabolic systems. (Russian) (82a:35055)

35R30 Inverse problems (undetermined coefficients, etc.)

- Ahn, Saeyoung Functional equation of inverse scattering for the Schrödinger equation with continuous and discrete spectra (short note). (See 82b:81117)
- Anger, Gottfried Convex sets in inverse problems. (Russian) 82g:35117
- Lectures on potential theory and inverse problems. (See 82g:31001)
- Atamanov, E. R. Uniqueness and estimate of the stability of the solution of a problem for a heat equation with moving transducer. (Russian) 82b:35149
- Belinskii, S. P. (with Romanov, V. G.) On the problem of determining the coefficients of a r -hyperbolic system. (Russian) 82c:35060
- Beznošenko, N. Ja. Determination of the coefficient q in the equation $u_t - \Delta u + qu = F$ (the case of first boundary value problem in the half-space). (Russian) 82b:35150
- Blagoveščenskii, A. S. On a case of explicit solution of a nonstationary inverse problem. 82c:35099
- Bojarski, Norbert N. Inverse scattering inverse source theory. 82m:35140
- Buhgeim, A. L. An inverse scattering problem in Kirchhoff's approximation. (Russian) 82m:35141
- Cannon, J. R. (with DuChateau, Paul) An inverse problem for a nonlinear diffusion equation. 82g:35118
- Colli Franzone, P. (with Magenes, Enrico) On the inverse potential problem of electrocardiology. 82c:35079
- DuChateau, Paul Monotonicity and uniqueness results in identifying an unknown coefficient in a nonlinear diffusion equation. 82c:35100
- See also Cannon, J. R., 82g:35118
- Fam Loi Vu Direct and inverse scattering problems for the perturbed equation of a string. (Russian) 82m:35142
- Grinfeld, M. A. On the theory of the ray method of investigating wave fronts in nonlinear problems. (Russian) 82c:35101
- Holota, Petr The boundary problem of physical geodesy after the appearance of Lars Hörmander's paper: present state. (Russian summary) (See 82g:31001)
- Jahno, V. G. One-dimensional inverse problem for the wave equation. (Russian) 82g:35119
- Jochum, Peter The inverse Stefan problem as a problem of nonlinear approximation theory. 82f:35184
- Kölbel, Klaus Eine inverse Aufgabe für parabolische Potentiale. 82b:35098
- Kuliev, M. A. See Namazov, G. K., 82c:35081
- Leon, Jérôme Jp. Inverse scattering connections. 82g:35120
- Magenes, Enrico See Colli Franzone, P., 82c:35079
- Morawetz, Cathleen Synge A formulation for higher-dimensional inverse problems for the wave equation. 82g:35121
- Murayama, Reiji See Suzuki, Takashi, 82c:35080
- Namazov, G. K. (with Kuliev, M. A.) Determination of the right-hand side of a nonlinear hyperbolic equation. (Russian) 82c:35081
- Reznickaja, K. G. A source problem. The linearized case when $a \neq 0$. (Russian) 82d:35105
- Richter, Gerard R. An inverse problem for the steady state diffusion equation. 82m:35143
- Romanov, V. G. ★Обратные задачи для дифференциальных уравнений. (Russian) [Inverse problems for differential equations] 82g:35123
- Inverse problems and energy inequalities. (Russian) 82g:35122
- See also Belinskii, S. P., 82c:35060
- Rösler, Rolf Inverse Aufgaben in der Geophysik. (See 82g:31001)
- Šiško, N. P. Inverse problem for a parabolic equation. (Russian) 82i:35164
- Suzuki, Takashi (with Murayama, Reiji) A uniqueness theorem in an identification problem for coefficients of parabolic equations. 82c:35080

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- Antonenko, O. F. (with Reznickaja, K. G.) The Newton-Kantorovič method in an inverse dynamic problem of seismics. (Russian) (82d:86006)
- Bertero, M. (with de Mol, Ch.; Viano, G. A.) The stability of inverse problems. (82g:65068)
- Bialynicka-Birula, Z. Nonlinear phenomena in the propagation of electromagnetic waves in the magnetized vacuum. (82b:78021)
- Bolt, Bruce A. What can inverse theory do for applied mathematics and the sciences? (82j:00022)
- Carroll, Robert Wayne (with Santosa, Fadil) Inverse scattering techniques in geophysics. (82g:86006)
- (with Santosa, Fadil) Résolution d'un problème inverse qui détermine complètement les données géophysiques. (English summary) (82d:86008)
- Ciałkowski, Michał Jacek See Grysa, Krzysztof, (82g:80012)
- Cross, Mark See Voller, V. R.; et al., (See 82g:80001)
- Grysa, Krzysztof (with Ciałkowski, Michał Jacek) Inverse problems of temperature fields. A survey. (Polish. Russian and English summaries) (82g:80012)
- Hagin, Frank A stable approach to solving one-dimensional inverse problems. (82f:65137)
- Kraičev, B. N. Estimates of control functions in an inverse problem for the heat equation. (Bulgarian. Russian and English summaries) (82c:35042)
- Maljarov, V. V. (with Pivovarič, V. N.) An algebraic method for solving an inverse problem of the quantum scattering theory for fixed energy under spin-orbit interaction. (Russian. English summary) (82g:81094)
- de Mol, Ch. See Bertero, M.; et al., (82g:65068)
- Moskvitin, V. N. An inverse problem for the wave equation. (Russian) (82c:76041)
- Muhometov, R. G. On a problem of reconstructing Riemannian metrics. (Russian) (82m:53071)
- Nedjalkov, I. P. On equations of the inverse problem of a geoelectrical field for homogeneous isotropic bodies in a constant current variant. (Russian) (82i:86008)
- Newell, Alan C. The inverse scattering transform. (See 82m:35001)
- Noi, H. ★Numerical investigations on the problem of Molodensky. (82j:86006)
- Pivovarič, V. N. See Maljarov, V. V., (82g:81094)
- Reznickaja, K. G. See Antonenko, O. F., (82d:86006)
- Santosa, Fadil See Carroll, Robert Wayne, (82d:86008) and (82g:86006)
- Simionescu, Claudia Lidia On a control problem in the theory of whirls. (Romanian summary) (82d:49005)
- Suleimanov, N. M. Theorems of Wiman-Valiron type for solutions of inverse-parabolic equations. (Russian) (82c:30037)
- Symes, W. W. Stable solution of the inverse reflection problem for a smoothly stratified elastic medium. (82d:73020)
- Tokuda, N. Numerical and series solution of a Stefan problem. (See 82g:80001)
- Tursynbekov, O. S. An inverse problem for an equation of mixed type. (Russian) (82d:35071)
- Viano, G. A. See Bertero, M.; et al., (82g:65068)
- Voller, V. R. (with Cross, Mark; Walton, P. G.) Assessment of weak solution numerical techniques for solving Stefan problems. (See 82g:80001)
- Walton, P. G. See Voller, V. R.; et al., (See 82g:80001)
- Witsch, Karl J. A uniqueness result for the geodetic boundary problem. (82j:58106)
- Zaharov, V. E. The inverse scattering method. (See 82m:35001)
- Zidarov, D. P. Some uniqueness conditions for the solution of the inverse gravimetric problem. (82d:86010)

35R35 Free boundary problems

- Acker, Andrew Interior free boundary problems for the Laplace equation. 82f:35185
- Bizanova, G. I. Stabilization of the solution of Stefan's second boundary value problem. (Russian) 82b:35151
- Caffarelli, Luis A. (with Gilardi, Gianni) Monotonicity of the free boundary in the two-dimensional dam problem. 82f:35186
- (with Friedman, Avner) Regularity of the free boundary of a gas flow in an n -dimensional porous medium. 82c:35096
- Cimatti, G. (with Menchi, O.) On the numerical solution of a variational inequality connected with the hydrodynamic lubrication of a complete journal bearing. 82j:35138
- Damlamian, Alain A variational formulation for the Stefan problem; existence of weak solutions. 82c:35081
- How to homogenize a nonlinear diffusion equation: Stefan's problem. 82f:35187
- Duchon, Jean (with Raoul, Robert) Évolution d'une interface solide-liquide sous l'effet de forces capillaires. (English summary) [Evolution of a solid-liquid interface under capillary forces] 82m:35144
- Fage, D. M. Convergence of approximations of the solution and domain in a problem with a free boundary. (Russian) 82f:35188
- Fasano, Antonio (with Primicerio, Mario; Rubinstein, Lev) A model problem for heat conduction with a free boundary in a concentrated capacity. 82j:35139
- Friedman, Avner (with Pozzi, Gianni A.) The free boundary for elastic-plastic torsion problems. 82i:35165
- Free boundaries in elastic-plastic problems. 82m:35145
- See also Caffarelli, Luis A., 82a:35096
- Gilardi, Gianni See Caffarelli, Luis A., 82f:35186
- Hewgill, Denton E. (with Reeder, John; Shinbrot, Marvin) Some exact solutions of the nonlinear problem of water waves. 82i:35169
- Ishii, Hitoshi On a certain estimate of the free boundary in the Stefan problem. 82c:35102
- Jakubov, S. Ja. Solvability of a class of problems with free boundary for linear equations of parabolic type. (Russian) 82b:35099
- Solvability of some classes of problems with unknown boundary for equations of parabolic type. (Russian) 82m:35146
- Jiang, Li Shang See Zhang, Gong Qing, 82b:35153
- Kinderlehrer, David (with Nirenberg, Louis) The smoothness of the free boundary in the one phase Stefan problem. 82b:35152
- Menchi, O. See Cimatti, G., 82j:35138
- Nirenberg, Louis See Kinderlehrer, David, 82b:35152
- Pozzi, Gianni A. See Friedman, Avner, 82i:35165
- Primicerio, Mario Diffusion problems with a free boundary. (Italian) 82i:35166
- See also Fasano, Antonio; et al., 82j:35139
- Raoul, Robert See Duchon, Jean, 82m:35144
- Reeder, John (with Shinbrot, Marvin) Three-dimensional, nonlinear wave interaction in water of constant depth. 82i:35168
- See also Hewgill, Denton E.; et al., 82i:35169
- Rubinstein, Lev See Fasano, Antonio; et al., 82j:35139
- Safeev, M. N. Solution of a nonlinear problem by the method of degenerate hypergeometric transformations. (Russian) 82g:35124
- Shinbrot, Marvin Periodic waves in a running stream. 82i:35167
- See also Reeder, John, 82i:35168 and Hewgill, Denton E.; et al., 82i:35169
- Stakgold, Ivar Estimates for some free boundary problems. 82f:35189
- Tabisz, Krzysztof On a kind of the Stefan problem. (Russian summary) 82c:35170
- Local and global solutions of the Stefan-type problem. (82c:35103)
- Visintin, Augusto Existence results for some free boundary filtration problems. (Italian summary) 82a:35106

Zhang, Gong Qing (with Jiang, Li Shang) The free boundary problem of the stationary water cone. (Chinese. English summary) **82b:35153**

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- Aksent'ev, L. A. (with Il'inskiĭ, N. B.; Salimov, R. B.) On V. N. Monahov's book: *Boundary value problems with free boundaries for elliptic systems of equations* ["Nauka" Sibirsk. Otdel., Novosibirsk, 1977; MR 57 #16979]. (Russian) **(82m:35045)**
- Alt, Hans Wilhelm Numerical solution of steady-state porous flow free boundary problems. **(82e:76062)**
- Aydinlis, N. ★Математическое описание процессов кристаллизации. (Russian) [A mathematical description of crystallization processes] **(82b:80001)**
- Baiocchi, Claudio Variational inequalities. (Italian) **(82b:49007)**
- Beneš, Václav E. See Karatzas, Ioannis, **(82f:93088)**
- Brauer, C. M. (with Nicolaenko, B.) Internal layers and free boundary problems. **(82a:35009)**
(with Nicolaenko, B.) Singular perturbations and free boundary value problems. **(82c:35005)**
- Caffarelli, Luis A. (with Kinderlehrer, David) Potential methods in variational inequalities. **(82b:49009)**
A remark on the Hausdorff measure of a free boundary, and the convergence of coincidence sets. (Italian summary) **(82c:35078)**
(with Friedman, Avner; Torelli, Alessandro) The free boundary for a fourth order variational inequality. **(82j:49007)**
(with Friedman, Avner; Visintin, Augusto) A free boundary problem describing transition in a superconductor. **(82a:81100)**
- Dervieux, A. (with Kawarada, Hideo) Free boundary problems for the Laplace equation: a priori estimates, existence theorems, asymptotic behaviours. **(82c:35050)**
- Do, Claude (with Raupp, Marco A.; Feijóo, Raúl A.) The dynamics of a bar in the presence of obstacles. **(82b:73028)**
- Drenska, N. T. Properties of difference schemes for the problem of cooling metal in a mold. (Russian) **(82b:65101)**
- Elliott, Charles M. (with Janovský, Vladimír) A variational inequality approach to Hele-Shaw flow with a moving boundary. **(82d:76031)**
- Fage, D. M. The indicatrix method in free boundary problems. **(82m:65110a)**
The indicatrix method. II. **(82m:65110b)**
- Fasano, Antonio (with Primicerio, Mario) Free boundary problems for nonlinear parabolic equations with nonlinear free boundary conditions. **(82j:35091)**
See also Rubinstein, Lev; et al., **(82f:35087)**
- Feijóo, Raúl A. See Do, Claude; et al., **(82b:73028)**
- Friedman, Avner See Caffarelli, Luis A.; et al., **(82j:49007)** and **(82a:81100)**
- Fusco, Giorgio An example of bifurcation in hydrostatics. **(82f:58030)**
- Hilbig, H. Existenzsatz für Potentialströmungen mit Totwassern um zwei geradlinige Hindernisse. (English and Russian summaries) **(82b:76009)**
- Il'inskiĭ, N. B. See Aksent'ev, L. A.; et al., **(82m:35045)**
- Ishii, Hitoshi Erratum: "Asymptotic stability of almost periodic solutions of a free boundary problem arising in hydraulics" [Bull. Fac. Sci. Engrg. Chuo Univ. 22 (1979), 73-95; MR 81k:35016]. **(82g:35008)**
- Janovský, Vladimír See Elliott, Charles M., **(82d:76031)**
- Jochum, Peter Differentiable dependence upon the data in a one-phase Stefan problem. **(82k:35054)**
- Karatzas, Ioannis (with Beneš, Václav E.) A degree method for free boundaries in stochastic control. **(82f:93088)**
- Kawarada, Hideo See Dervieux, A., **(82c:35050)**
- Keller, Joseph B. Some bubble and contact problems. **(82a:76010)**
- Kinderlehrer, David See Caffarelli, Luis A., **(82b:49009)**
- Kulagin, V. L. A parabolic problem with unknown boundary. (Russian) **(82c:35036)**
- Lièvre, C. (with Rothen, F.) New approach to the morphological stability of the Stefan problem. **(82c:80008)**
- Longuet-Higgins, M. S. On the overturning of gravity waves. **(82i:76008)**
- Macovei, Doina (with Pascali, Dan) Variational inequality techniques in free boundary problems. **(82e:76066)**
- (Monahov, V. N.) See Aksent'ev, L. A.; et al., **(82m:35045)**
- Nicolaenko, B. See Brauer, C. M., **(82a:35009)** and **(82c:35005)**
- Pascali, Dan See Macovei, Doina, **(82e:76066)**
- Platonova, O. A. Singularities in the problem of the fastest passage of an obstruction. (Russian) **(82k:58022)**
- Primicerio, Mario See Rubinstein, Lev; et al., **(82f:35087)** and Fasano, Antonio, **(82j:35091)**
- Raupp, Marco A. See Do, Claude; et al., **(82b:73028)**
- Rothen, F. See Lièvre, C., **(82c:80008)**
- Rubinstein, Lev (with Fasano, Antonio; Primicerio, Mario) Remarks on the analyticity of the free boundary for the one-dimensional Stefan problem. **(82f:35087)**
- Salei, S. V. On the rate of convergence of a free boundary to the limit value in a Stefan problem. (Russian. English summary) **(82m:35067)**
- Salimov, R. B. See Aksent'ev, L. A.; et al., **(82m:35045)**
- Šamilo, A. H. On a problem for partial differential equations. (Russian. Azerbaijani and English summaries) **(82i:35047)**
- Sansó, Fernando Molodensky's problem in gravity space: a review of the first results. **(82k:86008)**
- Scarpini, F. Some nonlinear complementarity systems algorithms and applications to unilateral boundary value problems. **(82b:49015)**
- Simon, Leon Regularity of capillary surfaces over domains with corners. **(82d:49043)**
- Tao, L. N. Solidification of a binary mixture with arbitrary heat flux and initial conditions. **(82j:80003)**
- Tarzia, Domingo Alberto Application of variational methods in the steady-state case of the two-phase Stefan problem. (Spanish) **(82d:80020)**
A family of problems which converges towards the steady-state case of the

two-phase Stefan problem. (Spanish) **(82d:80021)**

Torelli, Alessandro A remark on a free boundary problem. (Italian summary) **(82m:76061)**

See also Caffarelli, Luis A.; et al., **(82j:49007)**

Troianello, Giovanni M. Unilateral Dirichlet problems of the nonvariational type. **(82b:35052)**

Verigin, N. N. A class of hydromechanics problems for domains with moving boundaries. (Russian) **(82m:76062)**

Visintin, Augusto See Caffarelli, Luis A.; et al., **(82a:81100)**

Zhang, Gong Qing Remarks on free boundary problems for the flux equations in plasma physics. **(82b:76072)**

35R45 Differential inequalities

secondary classifications:

- Goldschmidt, Bernd Eigenschaften der Lösungen elliptischer Differentialgleichungen erster Ordnung in der Ebene. **(82d:35034)**
- Ogawa, Hajimu Energy decay for differential inequalities in a Hilbert space with applications to ultrahyperbolic equations. **(82m:35106)**

35R60 Equations and systems with randomness

- Béus, Georges A. Variational formulation of some problems for the random heat equation. **82c:35082**
- Cahlon, Baruch The heat equation with stochastic nonlinear boundary conditions. **82c:35082**
- Capinski, Marek Statistical solutions of the heat equation. **82i:35171**
- Chow, Pao Liu Some random boundary problems in two dimensions. **82c:35083**
- Dedlik, P. E. (with Šubin, M. A.) Random pseudodifferential operators and stabilization of the solutions of parabolic equations with random coefficients. (Russian) **82f:35190**
- Gončarenko, V. M. Random oscillations of distributed linear systems. (Russian. English summary) **82m:35147**
- Jurinskii, V. V. Averaging of elliptic equations with random coefficients. (Russian) **82a:35097**
- Nikolić-Despotović, Danica One type of random diffusion equation. (Serbo-Croatian summary) **82g:35125**
- Šubin, M. A. See Dedlik, P. E., **82f:35190**
- Uvarov, O. V. A way of calculating the characteristic functional of solutions of stochastic partial differential equations. (Russian) **82h:35100**
- Žaurov, Ju. V. A limit theorem for a parabolic equation with a random coefficient. (Russian) **82f:35191**
A limit theorem for equations of elliptic type with a random coefficient. (Russian) **82a:35098**

secondary classifications:

- Bobrik, R. V. Random functions satisfying a second-order linear partial differential equation of hyperbolic type. (Russian) **(82a:60090)**
- Čerkašov, I. D. On the theory of time-optimal control of diffusion processes. (Russian) **(82e:60122)**
- Chow, Pao Liu Note on the stability of stochastic reaction-diffusion equations. **(82a:60081)**
- Étborai, Mahmoud M. Generalized random processes and Cauchy's problem for some partial differential systems. **(82i:60111)**
- Gihman, I. I. Existence of weak solutions of a class of hyperbolic systems that contain two-parameter white noise. (Russian) **(82a:60091)**
- Grecksch, Wilfried (with Schild, Wilma) Über eine realisierungsweise partielle Differentialgleichung. **(82j:60111)**
- Janssen, Arnold (with Siebert, Eberhard) Convolution semigroups and generalized telegraph equations. **(82m:35105)**
- Krylov, N. V. (with Rozovskii, B. L.) Itô equations in Banach spaces and strongly parabolic stochastic partial differential equations. (Russian) **(82i:60108)**
- (Kukhta, T. K.) See Questions of modeling complex systems, **(82i:93088a)**
- Le Thien Hyong Equation for the second-order moment of the solution of a stochastic partial differential equation. (Ukrainian. English and Russian summaries) **(82b:60069)**
- Ludwig, Donald An unusual free boundary problem from the theory of optimal harvesting. **(82m:92062)**
- Lukáčev, B. Ja. Asymptotic behavior of solutions of equations of hyperbolic type with random right-hand side. (Russian) **(82i:60116)**
- (Marjanović, T. P.) See Questions of modeling complex systems, **(82i:93088a)**
- Ogura, Yukio A remark on a branching Brownian motion on a Riemannian manifold with negative curvature. **(82d:60157)**
- Papanicolaou, George C. Remarks on limit theorems for partial differential equations with random coefficients. **(82c:60099)**
- Ponomarenko, L. L. A problem of distinguishing and identifying objects described by stochastic equations of hyperbolic type. (Russian) **(82i:93088b)**
- Pritula, N. N. Excitation of oscillations in nonlinear systems with distributed parameters and a random deviation with respect to time. (Russian) **(82h:35094)**
- Repinova, N. M. A boundary value problem with random perturbations. (Russian) **(82b:60071)**
- Rozovskii, B. L. Conditional distributions of degenerate diffusion processes. (Russian. English summary) **(82e:60128)**
See also Krylov, N. V., **(82i:60108)**
- Saleev, A. I. Statistical analysis of linear stochastic boundary value problems by the method of reduction to a Cauchy problem. **(82j:82049)**
- Schild, Wilma See Grecksch, Wilfried, **(82j:60111)**
- Siebert, Eberhard See Janssen, Arnold, **(82a:35105)**
- Questions of modeling complex systems ★Вопросы моделирования сложных систем. (Russian) [Questions of modeling complex systems] **(82i:93088a)**
- Systems theory ★Вопросы моделирования сложных систем. (Russian) [Questions of modeling complex systems] **(82i:93088a)**

35R99 None of the above, but in this section

Gilezan, Koriolan Équations fonctionnelles pseudo-bouliennes généralisées du deuxième ordre. (Serbo-Croatian summary) 82f:35192

secondary classifications:

- Azovskii, V. V. Solution of a problem of type D for an equation of composite type. (Russian) (82b:35106)
 Barbu, Viorel (with Da Prato, G.) Existence and approximation for stationary Hamilton-Jacobi equations. (82k:49040)
 Da Prato, G. See Barbu, Viorel, (82k:49040)
 Ragimov, M. B. Overdetermined systems of partial differential equations in a Banach algebra. (Russian) (82f:35140)

35Sxx Pseudodifferential operators [See also 47G05, 58G15.]

Taylor, Michael E. ★Pseudodifferential operators. 82i:35172
 Trèves, François ★Introduction to pseudodifferential and Fourier integral operators. Vol. 1. 82i:35173

secondary classifications:

Trèves, François ★Introduction to pseudodifferential and Fourier integral operators. Vol. 2. (82i:58068)

35S05 General theory

- Balabane, Mikhael (with Emamirad, Hassan Ali) Systèmes pseudo différentiels paraboliques dans $L^p(\mathbb{R}^n)$. (English summary) 82d:35107
 Emamirad, Hassan Ali See Balabane, Mikhael, 82d:35107
 Fefferman, Charles (with Phong, D. H.) On the asymptotic eigenvalue distribution of a pseudodifferential operator. 82h:35101
 (with Phong, D. H.) The uncertainty principle and sharp Gårding inequalities. 82j:35140
 Hanges, Nicholas Parametrix and propagation of singularities for operators with noninvolutive characteristics. 82m:35084
 Ivrii, V. Ja. Wave fronts of solutions of certain pseudodifferential equations. (Russian) 82c:35085a
 Wave fronts of solutions of certain hyperbolic pseudodifferential equations. (Russian) 82c:35085b
 Kolesnik, V. M. See Ljance, V. E., 82b:35155
 Kovačev, V. Hr. Construction of a parametrix for a hyperbolic system with characteristics of variable multiplicity. 82m:35148
 Laubin, P. Wave front set analytique d'une intégrale oscillante. (English summary) 82c:35154
 (with Lousberg, P.) Sur le wave front set au bord d'une distribution à trace. (English summary) [On the wave front set at the boundary of a distribution of trace class] 82m:35149
 Ljance, V. E. (with Kolesnik, V. M.) A condition for the correctness of a symbol of a one-dimensional pseudodifferential operator. (Russian) 82b:35155
 Lousberg, P. See Laubin, P., 82m:35149
 Markovskii, A. I. The effect of a pseudodifferential operator on a rapidly oscillating exponent. (Russian) 82k:35104
 Novokšenov, V. Ju. Asymptotic behavior with respect to the small parameter of a solution of an elliptic pseudodifferential equation in half space. (Russian) 82i:35174
 Parenti, C. (with Rodino, Luigi) Parametrix for a class of pseudodifferential operators. I, II. 82i:35175
 (with Rodino, Luigi) On general pseudodifferential operators. 82b:35156
 (with Segala, Fausto) Propagation and reflection of singularities for a class of evolution equations. 82j:35141
 Phong, D. H. See Fefferman, Charles, 82h:35101 and 82j:35140
 Popivanov, Pet' r R. (with Popov, Georgi St.) A priori estimates and some microlocal properties of a class of pseudodifferential operators. 82f:35193
 Popov, Georgi St. Parametrix for pseudodifferential operators with multiple characteristics. (Russian) 82b:35102
 See also Popivanov, Pet' r R., 82f:35193
 Qiu, Qing Jiu On a class of non-Fuchsian hyperbolic pseudodifferential operators with multiple characteristics. (Chinese. English summary) 82h:35103
 Radžahov, Ė. L. A class of pseudodifferential operators. (Russian. Tajiki summary) 82d:35108
 Rodino, Luigi See Parenti, C., 82b:35156 and 82i:35175
 Segala, Fausto Lower bounds for a class of pseudodifferential operators. (Italian summary) 82h:35104
 See also Parenti, C., 82j:35141
 Sjölin, Per Two inequalities for pseudodifferential operators. (Russian summary) 82d:35109
 Solrab, Houshang H. The C^* -algebra of the n -dimensional harmonic oscillator. 82i:35176
 Tulovskii, V. N. Propagation of singularities of operators with characteristics of constant multiplicity. (Russian) 82b:35150
 Unterberger, A. Les opérateurs métadifférentiels. 82j:35142
 Wuidar, J. Sur un critère de J. Sjöstrand caractérisant le "wave front set" analytique des distributions. (English summary) 82j:35143
 Zaidman, S. On asymptotic series of symbols and of general pseudodifferential operators. 82d:35110
- secondary classifications:
- Agranović, M. S. (with Amosov, B. A.) Matrix elliptic pseudodifferential operators on a closed curve. (Russian) (82k:58091)
- Alinhac, S. On the reduction of pseudodifferential operators to canonical forms. (82c:58091)
- Álvarez Alonso, Josefina Existence of a functional calculus over some algebras of pseudodifferential operators. (82c:47061)
- Amosov, B. A. See Agranović, M. S., (82k:58091)
- Aoki, Susumu On the boundedness and the nuclearity of pseudodifferential operators. (82d:47047)
- Banja, Valeriu The identity of weak and strong extensions of a class of Fourier integral operators. (82a:47046)
- Beals, Richard L^p and Hölder estimates for pseudodifferential operators: necessary conditions. (82b:47061)
- Boer, T. B. On the propagation of singularities for operators with involutive characteristics. (82c:58054)
- Catana, V. Le "wave front set" partiel des distributions et applications. (82c:35028)
- Charbonnel, Anne-Marie Spectre conjoint d'opérateurs pseudodifférentiels qui commutent. (English summary) [Joint spectrum of commuting pseudodifferential operators] (82m:47035)
- Dedli, P. E. Theorems on the boundedness of almost periodic pseudodifferential operators. (Russian) (82i:47084)
- Farris, Mark Egorov's theorem on a manifold with diffractive boundary. (82m:58050)
- Feigin, V. I. Some classes of pseudodifferential operators in \mathbb{R}^n and some applications. (Russian) (82b:47062)
- Fujiwara, Daisuke An approximate positive part of essentially selfadjoint pseudodifferential operators. I. (82b:47048a)
 An approximate positive part of essentially selfadjoint pseudodifferential operators. II. (82b:47048b)
- Godin, Paul A class of pseudodifferential operators with double characteristics which do not propagate singularities. (82b:58090)
- Grigis, Alain Propagation des singularités pour des opérateurs pseudodifférentiels à caractéristiques doubles. (82g:58085)
 Propagation des singularités au bord d'ouverts de \mathbb{C}^n . (82j:35108)
- Guillemin, Victor (with Sternberg, Shlomo) Some problems in integral geometry and some related problems in microlocal analysis. (82b:58087)
 (with Uhlmann, G.) Oscillatory integrals with singular symbols. (82d:58065)
- Höppner, Wolfgang ★Über gruppeninvariante Randwertprobleme. (German) [On group invariant boundary value problems] (82g:58096)
- Hörmander, Lars Subelliptic operators. (82c:35029)
 On the asymptotic distribution of the eigenvalues of pseudodifferential operators in \mathbb{R}^n . (82i:35140)
- Leray, Jean The meaning of Maslov's asymptotic method: the need of Planck's constant in mathematics. (82m:58052)
- Levondorskii, S. Z. General calculus of pseudodifferential operators and asymptotic properties of the spectrum. (Russian) (82b:47050)
- Meyer, Yves Estimations L^2 pour les opérateurs pseudo-différentiels. (82g:35014)
- Miller, Kenneth G. Parametrix for hypoelliptic operators on step two nilpotent Lie groups. (82b:35040)
- Mišenko, A. S. Banach algebras, pseudodifferential operators and their applications to K -theory. (Russian) (82c:46092)
- Munster, M. (with Wuidar, J.) Majoration de type analytique pour une intégrale particulière. (English summary) (82c:46057)
- Nagel, Alexander (with Stein, Elias M.) ★Lectures on pseudodifferential operators: regularity theorems and applications to nonelliptic problems. (82f:47059)
- Nazaikinskii, V. E. (with Osmjan, V. G.; Sternin, B. Ju.; Šatalov, V. E.) Fourier integral operators and the canonical operator. (Russian) (82b:58049)
- Osmjan, V. G. See Nazaikinskii, V. E.; et al., (82b:58049)
- Pham, Frédéric Déploiements de singularités de systèmes holonomes. (English summary) (82c:58089)
- Popivanov, Pet' r R. (with Popov, Georgi St.) Microlocal properties of a class of pseudodifferential operators with multiple characteristics. (Russian) (82d:35038)
- Popov, Georgi St. Hypoelliptic operators with multiple characteristics. (82f:35059)
 See also Popivanov, Pet' r R., (82d:35038)
- Qi, Min You On a class of linear partial differential equations with critical points in the Hamiltonian field. (Chinese) (82b:35035)
- Rubanović, S. G. Hölder spaces with weight and pseudodifferential operators. (Russian. Armenian summary) (82f:47061)
- Santos Filho, José Ruidival Propagation of singularities through radial points. (82i:58069)
- Šatalov, V. E. See Nazaikinskii, V. E.; et al., (82b:58049)
- Serra, Elena Invariants and hypoellipticity for a class of pseudodifferential operators. (Italian. English summary) (82i:35043)
- Stein, Elias M. See Nagel, Alexander, (82f:47059)
- Sternberg, Shlomo See Guillemin, Victor, (82b:58087)
- Sternin, B. Ju. See Nazaikinskii, V. E.; et al., (82b:58049)
- Uhlmann, G. See Guillemin, Victor, (82d:58065)
- Wuidar, J. See Munster, M., (82c:46057)

35S10 Initial value problems

- Drin', Ja. M. See Eidel'man, S. D., 82i:35177
 Eidel'man, S. D. (with Drin', Ja. M.) Construction and investigation of classical fundamental solutions to the Cauchy problem of uniformly parabolic pseudodifferential equations. (Russian) 82i:35177
 Ichinose, Wataru Propagation of singularities for a hyperbolic equation with nonregular characteristic roots. 82a:35099

secondary classifications:

- Nakamura, Gen (with Uryu, Hitoshi) Parametrix of certain weakly hyperbolic operators. (82a:35061)
 Uryu, Hitoshi See Nakamura, Gen, (82a:35061)

Yamamoto, Kazuhiro The Cauchy problem for some class of hyperbolic differential operators with variable multiple characteristics. (82k:35072)

35S15 Boundary value problems

Bove, Antonio (with Franchi, Bruno; Obrecht, Enrico) A boundary value problem for elliptic equations with polynomial coefficients in a half space. I. Pseudodifferential operators and function spaces. (Italian summary) 82j:35144a

(with Franchi, Bruno; Obrecht, Enrico) A boundary value problem for elliptic equations with polynomial coefficients in a half space. II. The boundary value problem. (Italian summary) 82j:35144b

Eskin, G. I. ★Boundary value problems for elliptic pseudodifferential equations. 82k:35105

Franchi, Bruno See Bove, Antonio; et al., 82j:35144

Grubb, Gerd Problèmes aux limites pseudo-différentiels dépendant d'un paramètre. (English summary) 82f:35194

Kataoka, Kiyomi Microlocal theory of boundary value problems. II. Theorems on regularity up to the boundary for reflective and diffractive operators. 82m:35152

Kataoka, Kiyomi Microlocal analysis of boundary value problems with applications to diffraction. 82k:35151

Novokšenov, V. Ju. Asymptotic behavior at infinity of the solution of an elliptic pseudodifferential equation in a half-space. (Russian) 82f:35195

Obrecht, Enrico See Bove, Antonio; et al., 82j:35144

Rauch, Jeffrey (with Sjöstrand, Johannes) Propagation of analytic singularities along diffracted rays. 82j:35145

Sjöstrand, Johannes Analytic singularities and microhyperbolic boundary value problems. 82c:35086

See also Rauch, Jeffrey, 82j:35145

(Smith, S.) See Eskin, G. I., 82k:35105

secondary classifications:

Gindikin, S. G. See Volevič, L. R., (82c:35042)

Grubb, Gerd A resolvent construction for pseudodifferential boundary value problems with applications. (82k:47069)

La résolvante d'un problème aux limites pseudo-différentiel elliptique. (English summary) (82f:35141)

Ljajbo, L. N. Normal solvability of some elliptic singular pseudodifferential equations. (Russian) (82k:35037)

Rabinović, V. S. Differential-difference equations in a half space. (Russian) (82m:35139)

Volevič, L. R. (with Gindikin, S. G.) The method of energy estimates in the mixed problem. (Russian) (82c:35042)

35S99 None of the above, but in this section

secondary classifications:

Costabel, Martin An inverse for the Gohberg-Krupnik symbol map. (82a:45025)

Dedik, P. E. (with Šubin, M. A.) Random pseudodifferential operators and stabilization of the solutions of parabolic equations with random coefficients. (Russian) (82f:35190)

von Grudzinski, Olaf (with Hansen, Sönke) Über Wellenfrontmengen von Distributionen und singuläre Träger von Faltungen. (82k:46059)

Hansen, Sönke See von Grudzinski, Olaf, (82k:46059)

Šatalov, V. E. See Sternin, B. Ju., (82a:58048)

Sternin, B. Ju. (with Šatalov, V. E.) Legendre uniformization of multivalued analytic functions. (Russian) (82a:58048)

Šubin, M. A. See Dedik, P. E., (82f:35190)

39-XX FINITE DIFFERENCES AND FUNCTIONAL EQUATIONS

39-01 Elementary exposition, textbooks

39-02 Advanced exposition (research surveys, monographs, etc.)

Baron, Karol ★Functional equations of infinite order. 82m:39001

Lueker, George S. Some techniques for solving recurrences. 82b:39001

Targonski, György ★Topics in iteration theory. 82j:39001

39-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Golovinskiĭ, I. A. Early history of analytic iteration and functional equations. (Russian) (82f:01040)

Kušnir, E. A. The connection of the theory of ordinary difference equations with practice in the 20th century. (Ukrainian. Russian summary) (82c:01036)

39-04 Explicit machine computation and programs (not the theory of computation or programming)

39-06 Proceedings, conferences, etc.

39Axx Finite differences [See also 65-XX.]

39A05 General

Baron, Karol On a majorization of distances between the values of a family of functions

and a fixed point. 82m:39002

Isaacs, Godfrey L. Exponential laws for fractional differences. 82c:39001

secondary classifications:

Pachpatte, B. G. On some fundamental n th order finite difference inequalities. (82g:39010)

Popenda, Jerzy (with Werbowksi, Jarosław) On the discrete analogy of Gronwall lemma. (82g:39011)

Przeworska-Rolewicz, Danuta ★Shifts and periodicity for right invertible operators. (82b:47012)

Werbowksi, Jarosław See Popenda, Jerzy, (82g:39011)

39A10 Difference equations

Agarwal, Ravi P. (with Thandapani, E.) On nonlinear discrete inequalities of Gronwall type. 82f:39001

Amaducci, Tullio (with Valenti, Santi) Sur une méthode de résolution de l'équation fonctionnelle $f(x+1)=q(x)f(x)$. (Italian summary) 82c:39002

Elianu, I. P. On a linear finite difference equation. (Romanian. French summary) 82b:39001

Exton, Harold A basic analogue of the Bessel-Clifford equation. 82j:39002

Fenyő, István See Forti, Costanza Borelli, 82b:39002

Fitzpatrick, W. J. (with Grimm, L. J.) On solutions of nonlinear difference systems. 82b:39003

Forti, Costanza Borelli (with Fenyő, István) On the difference equations with variable increments. (Italian. English summary) 82c:39002

Grimm, L. J. See Fitzpatrick, W. J., 82b:39003

Hooker, John W. (with Patula, William T.) Riccati type transformations for second-order linear difference equations. 82m:39003

Husainov, D. Ja. Investigation of the stability of solutions of difference systems by Ljapunov's second method. (Russian) 82f:39002

Ikeda, Hideo (with Tanaka, Sen-ichiro) On the general solutions of the difference equations $y_i(x+1)=\prod_{j=1}^m (y_j(x))^{a_{ij}} f_i(x, y(x))$. III. 82j:39003

Iljasov, K. Periodic solutions of second-order nonlinear difference equations that are not solved with respect to the highest difference. (Ukrainian. English and Russian summaries) 82k:39001

Kloeden, P. E. Chaotic difference equations in \mathbb{R}^n . 82m:39004

Lapšina, R. B. (with Šestakov, A. A.) Asymptotic properties of solutions of a nonautonomous difference system. (Russian) (See 82m:34004)

Malek, Marian Un analogue aux différences finies des inégalités différentielles faibles du type parabolique avec des conditions aux limites non linéaires. (English and Russian summaries) 82b:39004

Malik, H. N. (with Qadir, A.) Pseudoperiodic difference equations. 82b:39002a

(with Qadir, A.) Solution of pseudoperiodic difference equations. 82b:39002b

Mingarelli, Angelo B. A limit-point criterion for a three-term recurrence relation. 82g:39001

Nijenhuis, Albert Complete solutions of linear difference equations. 82a:39001

Pachpatte, B. G. Strict stability of finite difference equations. 82m:39005

Patula, William T. See Hooker, John W., 82m:39003

Petrenko, V. P. The growth of Q -pseudomeromorphic solutions of difference equations. (Russian) 82f:39003

Popenda, Jerzy (with Werbowksi, Jarosław) On the asymptotic behaviour of the solutions of difference equations of second order. 82i:39001

Qadir, A. See Malik, H. N., 82b:39002

Rizvi, S. A. H. Solution of a general linear difference equation. 82d:39001

Sadoveanu, Viorel Inhomogeneous linear recurrent sequences. (Romanian) 82g:39002

Šešter, B. L. See Tabidze, G. S., 82g:39004

Šestakov, A. A. See Lapšina, R. B., (See 82m:34004)

Singh, Vishwa Nath Solution of a general homogeneous linear difference equation. 82c:39002a

Corrigendum: "Solution of a general homogeneous linear difference equation".

82c:39002b

Szafrański, Zdzisław On some oscillation criteria for difference equations of second order. 82c:39003

Szmanda, Blazej Oscillation of solutions of second order difference equations. 82j:39004

Oscillation of solutions of second order difference equations. 82g:39003

Oscillation theorems for nonlinear second-order difference equations. 82c:39001

Tabidze, G. S. (with Šešter, B. L.) Some boundary value problems for second-order difference equations. (Russian. Georgian and English summaries) 82g:39004

Tanaka, Sen-ichiro See Ikeda, Hideo, 82j:39003

Thandapani, E. See Agarwal, Ravi P., 82f:39001

Valenti, Santi See Amaducci, Tullio, 82c:39002

Werbowksi, Jarosław See Popenda, Jerzy, 82i:39001

Yangihara, Niro Meromorphic solutions of some difference equations. 82m:39006a

Meromorphic solutions of some difference equations. II. 82m:39006b

secondary classifications:

Abramlin, V. N. The accuracy of three-layer difference schemes for quasilinear parabolic and hyperbolic equations. (Russian) (82j:65063)

Difference schemes of gas dynamics. (Russian) (82j:76062)

Baker, John A. On a theorem of Daróczy, Lajkó and Székelyhidi. (82b:39007)

Banks, S. P. An abstract setting for nonlinear distributed multipass processes. (82m:93052)

Beljankov, A. Ja. See Rjaben'kii, V. S., (82f:39004)

Caughey, T. K. See Ma, Fal, (82k:70030) and (82k:93076)

Clark, Dean S. A stochastic difference equation. (82f:60148)

Clarke, Bruce L. See Rogers, Thomas D., (82g:58058)

Davis, Philip J. See Rowland, John H., (82m:65116)

Dunkl, Charles F. A difference equation and Hahn polynomials in two variables. (82f:33007)

- Gourieroux, Christian (with Laffont, Jean-Jacques; Montfort, A.) On the backward-forward procedure. (82i:90017)
- Guess, Harry A. An invariance principle for solutions to stochastic difference equations. (82i:60067)
- Heathcote, H. E. A generalized Maclaurin transform for solving difference equations. (82j:65092)
- Huang, Hai See Kushner, Harold J., (82i:60118)
- Kodama, Shinzo See Maeda, Hajime, (82d:65085)
- Kushner, Harold J. (with Huang, Hai) On the weak convergence of a sequence of general stochastic difference equations to a diffusion. (82i:60118)
- Laffont, Jean-Jacques See Gourieroux, Christian; et al., (82i:90017)
- Ma, Fai (with Caughey, T. K.) On the stability of stochastic difference systems. (German summary) (82h:93076)
- (with Caughey, T. K.) Stability of stochastic difference systems. (82h:70030)
- Maeda, Hajime (with Kodama, Shinzo) Positive realization of difference equations. (82d:65085)
- Maravall Casesnoves, Dario Finite difference equations and linear differential equations with random coefficients. (Spanish. English summary) (82g:60081)
- Asymptotic behavior and invariant solutions of linear systems of differential equations and of finite differences with random initial values and stochastic theory of control. (Spanish. English summary) (82m:93081)
- McCoy, Barry M. (with Perk, Jacques H. H.; Wu, Tai Tsun) Ising field theory: quadratic difference equations for the n -point Green's functions on the lattice. (82h:82077)
- Montfort, A. See Gourieroux, Christian; et al., (82i:90017)
- Oono, Yoshitsugu (with Osikawa, Motosige) Chaos in nonlinear difference equations. I. Qualitative study of (formal) chaos. (82h:58080)
- Osikawa, Motosige See Oono, Yoshitsugu, (82h:58080)
- Peil, H. Stability of some stochastic difference equations with piecewise constant coefficients. (82m:60077)
- Perk, Jacques H. H. See McCoy, Barry M.; et al., (82h:82077)
- Rjaben'kii, V. S. (with Beljankov, A. Ja.) Difference potentials and projectors. (Russian) (82i:39004)
- Rogers, Thomas D. (with Clarke, Bruce L.) A continuous planar map with many periodic points. (82g:58058)
- Rosner, J. (with Timischl, W.) Über ein Differenzengleichungssystem der Populationsgenetik. (82g:92028)
- Rowland, John H. (with Davis, Philip J.) On the selection of test data for recursive mathematical subroutines. (82m:65116)
- Shimomura, Shun Entire solutions of a polynomial difference equation. (82j:30029)
- Silvert, William (with Smith, William R.) The response of ecosystems to external perturbations. (82h:92035)
- Smith, William R. See Silvert, William, (82h:92035)
- Timischl, W. See Rosner, J., (82g:92028)
- Van der Cruyssen, P. Linear difference equations and generalized continued fractions. (German summary) (82e:65129)
- Watanabe, Toshihiro On a difference system of the integrals of Pochhammer. (82e:41050)
- Wu, Tai Tsun See McCoy, Barry M.; et al., (82h:82077)
- Yu, Zhong Ming Stability of nonlinear stochastic difference equations. (Chinese. English summary) (82j:60118)
- Zeilberger, Doron Partial difference equations in $m_1 > m_2 > \dots > m_n > 0$ and their applications to combinatorics. (82a:05009)
- Zubov, V. I. ★ Теория уравнений управляемого движения. (Russian) [Theory of equations of a controllable motion] (82i:34002)

39A11 Stability of difference equations

- Alwright, D. J. Convergence theorems for k -term recurrence relations. 82d:39002
- Cole, R. J. See Pescatore, C., 82h:39005
- Doan Trinh Ninh On the central exponent and stability of a finite difference system. (Vietnamese. English summary) 82c:39002
- Pescatore, C. (with Cole, R. J.) A method for predicting the stability characteristics of three-term homogeneous recurrence relations. 82h:39005
- Širobokov, N. V. Exponential stability of difference equations. (Russian) 82d:39003
- Trusov, A. F. Asymptotic stability of nonstationary difference schemes. (Russian) 82e:39004

secondary classifications:

- Przyhuski, K. Maciej The Lyapunov equation and the problem of stability for linear bounded discrete-time systems in Hilbert space. (82f:47023)

39A12 Discrete version of topics in analysis

- Beljankov, A. Ja. See Rjaben'kii, V. S., 82i:39004
- Rjaben'kii, V. S. (with Beljankov, A. Ja.) Difference potentials and projectors. (Russian) 82f:39004
- Teptin, A. L. Estimates of the Green function of a multipoint boundary value problem. (Russian) 82h:39003
- secondary classifications:
- Bučko, Zygmunt Eine Operatorenmethode zur Lösung von gewöhnlichen linearen Differenzengleichungen. (82f:44004)
- Campanino, M. (with Epstein, H.) On the existence of Feigenbaum's fixed point. (82j:58099)
- Dybin, V. B. (with Pasenčuk, A. È.) Discrete convolutions in the quarter plane with a vanishing symbol. II. (Russian) (82c:47035)
- Epstein, H. See Campanino, M., (82j:58099)
- Finin, G. S. See Valčev, K. G., (82f:93037)
- Fitzpatrick, W. J. (with Grimm, L. J.) On solutions of nonlinear difference systems. (82b:39003)

- Grimm, L. J. See Fitzpatrick, W. J., (82b:39003)
- Herceg, Dragoslav Nichtäquidistante Diskretisierung der Grenzscheidendifferentialgleichungen und einige Eigenschaften von diskreten Analog. (Serbo-Croatian summary) (82j:65054)
- McCoy, Barry M. (with Wu, Tai Tsun) Some properties of the nonlinear partial difference equation for the Ising-model correlation function. (82h:82076)
- Mingarelli, Angelo B. A limit-point criterion for a three-term recurrence relation. (82g:39001)
- Namba, Toshiyuki Asymptotic behaviour of solutions of the diffusive Lotka-Volterra equations. (82a:92030)
- Pasenčuk, A. È. See Dybin, V. B., (82c:47035)
- Popenda, Jerzy (with Werbowski, Jarosław) On the asymptotic behaviour of the solutions of difference equations of second order. (82i:39001)
- Stys, Tadeusz A discrete maximum principle. (82h:65072)
- Valčev, K. G. (with Finin, G. S.) Functional equations for optimal equation control synthesis of a nonlinear discrete dynamic system. (Russian) (82f:93037)
- Werbowski, Jarosław See Popenda, Jerzy, (82i:39001)
- Wu, Tai Tsun See McCoy, Barry M., (82h:82076)

39A70 Difference operators [See also 47B39.]

- Kisakevič, Ju. L. Two types of inverse problems for difference operators. (Ukrainian. Russian summary) 82f:39005
- secondary classifications:
- Gur'janov, A. E. Recursive calculation of the solutions of a linear homogeneous stationary system. (Russian) (82c:65044)
- Kocić, Ljubiša M. See Lacković, Ivan B., (82g:26025)
- Lacković, Ivan B. (with Kocić, Ljubiša M.) Invariant transformations of some sequence classes. (Serbo-Croatian summary) (82g:26025)
- Sljusarčuk, V. E. Invertibility of difference operators. (Russian. English summary) (82i:47047)

39A99 None of the above, but in this section

secondary classifications:

- Agrawal, Hukum Chand On a unified class of polynomials. (82f:33010)
- Laczovich, M. Functions with measurable differences. (82a:39002)

39Bxx Functional equations [See also 30D05.]

- (Haruki, Shigeru) See Bibliography: Functional equations, 82c:39005
- Bibliography:
- Functional equations Works on functional equations. VI. 82c:39005

39B05 General

- Clark, W. E. (with Mukherjee, A.) Comments on a functional equation. 82c:39003
- Crstici, B. (with Neagu, M.; Tudor, Gh.) Construction of certain classes of solutions of certain functional equations. (Romanian. French summary) 82m:39007
- Forti, Costanza Borelli Some classes of solutions of the functional equation $f(L+x) = f(L) + f(x)$. (Italian summary) 82m:39008
- Janić, Radovan R. See Martić, Branislav, 82c:39004
- Kardos, Peter A generalization of Bellman's functional equation. 82c:39006
- Krüppel, Manfred Ein Eindeutigkeitsatz für stetige Lösungen von Funktionalgleichungen. 82d:39004
- Martić, Branislav (with Janić, Radovan R.) Sur quelques généralisations des équations fonctionnelles. 82c:39004
- Mukherjee, A. See Clark, W. E., 82c:39003
- Neagu, M. See Crstici, B.; et al., 82m:39007
- Tudor, Gh. See Crstici, B.; et al., 82m:39007

secondary classifications:

- Burgués, Carme On the diagonal section and zero set of a t -norm. (Spanish. English summary) (82m:08001)
- Cowen, Carl C. Iteration and the solution of functional equations for functions analytic in the unit disk. (82i:30036)
- Czerwik, Stefan ★ Fixed point theorems and special solutions of functional equations. (82h:54072)
- Dobordžiginidze, L. G. A functional equation of the nonlinear theory of elasticity. (Russian) (82j:73012)
- Duggal, B. P. Functional equations and linear transformations. III C. Permutability. (82c:47036a)
- Functional equations and linear transformations. III D. Combinations. (82c:47036b)
- von Golitschek, Manfred Remarks on functional representation. (82g:26017)
- Kasperski, Andrzej The structure of the set of optimal strategies for a certain functional equation of the dynamic programming in case of the concave function. (82d:90122)
- Mathai, A. M. (with Rathie, Pushpa N.) Recent contributions to axiomatic definitions of information and statistical measures through functional equations. (82d:94022)
- Raginor, M. B. Overdetermined systems of partial differential equations in a Banach algebra. (Russian) (82f:35140)
- Rathie, Pushpa N. See Mathai, A. M., (82d:94022)
- Székeleyhidi, László An extension theorem for a functional equation. (82k:39005)

39B10 Equations containing iterates, equations of rank one

- Czugala, József On Lipschitzian solutions of a functional equation containing the superposition of the unknown function. **82m:39009**
- Ger, Joanna On analytic solutions of the equation $\varphi(f(x)) = g(x, \varphi(x))$. II. (Polish summary) **82c:39002**
- Kobelbauer, Helmut Franz ★Stetige Iterationen und deren invariante Funktionen bei Kontraktionen des C^1 . (German) [Continuous iterations and their invariant functions in contractions of C^1] **82i:39003**
- Malenica, Mirjana On a solution of the functional equation $\varphi(x) + \varphi[f(x)] = F(x)$. (Serbo-Croatian. French summary) **82h:39006**
- Zorik, L. V. On small solutions of nonlinear functional equations. (Russian) **82m:39010**

secondary classifications:

- Krüppel, Manfred Ein Eindeutigkeitsatz für stetige Lösungen von Funktionalgleichungen. (**82d:39004**)

39B20 Equations for one unknown function of one variable, rank greater than one

- Angelov, V. G. (with Bañov, D. D.) Existence and uniqueness of the solution of m -th-order nonlinear functional equations in the space L^p . (Russian) **82i:39004**
- Bañov, D. D. See Angelov, V. G., **82i:39004**
- Derfel, G. A. Asymptotic behavior of solutions of a class of functional equations with several transformations of the argument. (Russian) **82f:39006**
- Gazdar, Abdus Sattar (with Thaheem, A. B.) A simple approach to determine the form of functions for certain functional equations. **82c:39003**
- Kulawik, Maciej Continuous and semicontinuous solutions of a functional equation. (Polish. Russian and English summaries) **82g:39005**
- Laczkovich, M. Functions with measurable differences. **82a:39002**
- Székelyhidi, László An extension theorem for a functional equation. **82k:39005**
- Thaheem, A. B. See Gazdar, Abdus Sattar, **82c:39003**

secondary classifications:

- Corovei, I. The functional equation $f(xy) + f(xy^{-1}) = 2f(x)g(y)$ for nilpotent groups. (**82j:39007**)
- Davison, T. M. K. A functional equation for quadratic forms. (**82a:39004**)
- Mahler, Kurt On a special nonlinear functional equation. (**82m:10042**)
- Maksa, Gy. On the bounded solutions of a functional equation. (**82g:39008**)

39B30 Equations for several unknown functions of one variable, systems

- Krzyszowiak-Dybiec, Z. Existence of differentiable solutions of a system of functional equations of first order. **82c:39004a**
- On differentiable solutions of some systems of functional equations of p th order. **82c:39004b**
- Martić, Branislav Sur certaines équations fonctionnelles. (Serbo-Croatian summary) **82c:39005**
- Mosner, Zenon Sur l'équation $f(x)f(y)f(-x-y) = g(x)g(y)g(-x-y)$. **82a:39003**

secondary classifications:

- Baringhaus, Ludwig Eine simultane Charakterisierung der geometrischen Verteilung und der logistischen Verteilung. (English summary) (**82g:62028**)

39B40 Equations for functions of several variables

- Aczél, J. Derivations and information functions (a tale of two surprises and a half). **82i:39005**
- (with Ng, C. T.) On general information functions. **82m:39011**
- Arlotti, Luisa Associativity hypotheses in information theory. (Italian. English summary) **82c:39006**
- Bertoluzza, Carlo (with Toscani, Giuseppe) Generalized derivative and laws of composition in information theory. (Italian) **82g:39006**
- Fenyő, István (with Paganoni, Luigi) On a system of functional equations. **82g:39007**
- Kannappan, P. (with Rathie, Pushpa N.) On the measurable solution of a functional equation in two variables. **82c:39007**
- On directed divergence, inaccuracy and a functional equation connected with Abel. II. **82c:39008**
- Laird, P. G. A reconsideration of the "three squares" problem. **82b:39007**
- Lajkó, K. On the general solution of rectangle-type functional equations. **82i:39007**
- Maksa, Gy. The general solution of a functional equation related to the mixed theory of information. **82i:39006**
- Maschio, G. On a system of functional equations from information theory. (Italian) **82f:39007**
- Ng, C. T. See Aczél, J., **82m:39011**
- Paganoni, Luigi See Fenyő, István, **82g:39007**
- Powązka, Zbigniew On the differentiability of generalized subadditive functions. **82m:39012**
- Rathie, Pushpa N. See Kannappan, P., **82c:39007**
- Rogers, D. G. A functional equation in statistical mechanics. **82m:39013**
- Toscani, Giuseppe See Bertoluzza, Carlo, **82g:39006**

secondary classifications:

- Aczél, J. A mixed theory of information. VI. An example at last: a proper discrete analogue of the continuous Shannon measure of information (and its characterization). (**82d:94028**)
- A mixed theory of information. VII. Inset information functions of all degrees. (**82d:94029**)

Information functions of degree $(0, \beta)$. (**82g:94005**)

- Benz, Walter On a functional equation arising from hyperbolic geometry. (**82b:51024**)
- Haruki, Shigeru Note on the equation $(\Delta_{x,x}^2 - \Delta_{x,y}^2)f = 0$. (**82f:39008**)
- Kannappan, P. On some functional equations from additive and nonadditive measures. II. (**82h:94014b**)
- A mixed theory of information. IV. Inset-inaccuracy and directed divergence. (**82d:94026**)
- On some functional equations from additive and nonadditive measures. I. (**82h:94014a**)
- On some functional equations from additive and nonadditive measures. III. (**82h:94014c**)
- Liamosi, Albert A method for the calculus of Bernstein's polynomial. (**82e:32017**)
- Maksa, Gy. A remark on symmetric biadditive functions having nonnegative diagonalization. (Serbo-Croatian summary) (**82d:39005**)

39B50 Functional equations on algebraic structures

- Corovei, I. The functional equation $f(xy) + f(yx) + f(xy^{-1}) + f(y^{-1}x) = 4f(x)f(y)$ on nilpotent groups. (Romanian. English summary) **82j:39005**
- Some properties of the solutions of the sine functional equation. (Romanian. English summary) **82j:39006**
- The functional equation $f(xy) + f(xy^{-1}) = 2f(x)g(y)$ for nilpotent groups. **82j:39007**
- Davison, T. M. K. A functional equation for quadratic forms. **82a:39004**
- (with Redlin, Lothar) Hosszu's functional equation over rings generated by their units. **82h:39004**
- Haruki, Shigeru Note on the equation $(\Delta_{x,x}^2 - \Delta_{x,y}^2)f = 0$. **82f:39008**
- Heuvers, Konrad J. Functional equations which characterize n -forms and homogeneous functions of degree n . **82f:39009**
- Kannappan, P. (with Sathyabhama, V.) On the generalized "extra" functional equation. **82a:39005**
- Lawrence, John W. The cocycle equation in division rings. **82h:39005**
- Ljubenova, E. T. On d'Alembert's functional equation on an abelian group. **82k:39006**
- Madaan, V. D. See Nath, Prem, **82h:39006**
- Nath, Prem (with Madaan, V. D.) On some extension theorems concerning generalized Cauchy functional equations. (Turkish summary) **82h:39006**
- Paganoni, Luigi (with Paganoni Marzegalli, Stefania) Cauchy's functional equation on semigroups. **82c:39009**
- Paganoni Marzegalli, Stefania See Paganoni, Luigi, **82c:39009**
- Redlin, Lothar See Davison, T. M. K., **82h:39004**
- Sathyabhama, V. See Kannappan, P., **82a:39005**
- Székelyhidi, László Functional equations on abelian groups. **82f:39010**
- The stability of linear functional equations. **82c:39007**

secondary classifications:

- Powązka, Zbigniew On the differentiability of generalized subadditive functions. (**82m:39012**)
- Stojaković, Zoran (with Ušan, Janez) On a maximal system of functional equations on quasigroups. (Serbo-Croatian summary) (**82b:20107**)
- Ušan, Janez See Stojaković, Zoran, (**82b:20107**)

39B60 Matrix functional equations

- Reich, Ludwig (with Schwaiger, Jens) Linearisierung formal-biholomorpher Abbildungen und Iterationsprobleme. **82g:39008**
- Schwaiger, Jens See Reich, Ludwig, **82g:39008**

secondary classifications:

- Kobelbauer, Helmut Franz ★Stetige Iterationen und deren invariante Funktionen bei Kontraktionen des C^1 . (German) [Continuous iterations and their invariant functions in contractions of C^1] (**82i:39003**)
- Ragimov, M. R. Some questions of functional and overdetermined systems of partial differential equations. I. (Russian) (**82d:35072**)

39B70 Functional equations on abstract spaces or structures

- Baker, John A. On a theorem of Daróczy, Lajkó and Székelyhidi. **82h:39007**
- Maksa, Gy. A remark on symmetric biadditive functions having nonnegative diagonalization. (Serbo-Croatian summary) **82d:39005**
- Mosner, Zenon Solution générale de l'équation de translation sur un demi-groupe. **82c:39010**
- Nikodem, Kazimierz On quadratic stochastic processes. **82h:39008**
- Siljursatuk, V. E. Bounded and almost periodic solutions of functional equations. (Russian) **82f:39011**

secondary classifications:

- Angelov, V. G. (with Bañov, D. D.) Existence and uniqueness of the solution of nonlinear functional equations in L^p space. (Russian) (**82c:47075**)
- Bañov, D. D. See Angelov, V. G., (**82c:47075**)
- Czugala, József On Lipschitzian solutions of a functional equation containing the superposition of the unknown function. (**82m:39009**)
- Khan, Mohd. Saeed A note on a nonlinear functional equation. (**82a:54086**)
- Villella Bressan, Rosanna On suitable spaces for studying functional equations using semigroup theory. (**82b:47100**)

39B99 None of the above, but in this section

- Alsina, Claudi Triangle functions and composition of probability distribution functions. **82i:39008**

secondary classifications:

- Kečkić, Jovan D. Applications of functional equations to differential equations. (Serbo-Croatian summary) (82g:34004)
 Szász, Árpád (with Szász, G.) Linear relations. (82b:15021)
 Szász, G. See Szász, Árpád, (82b:15021)

39C05 Functional inequalities [See also 26Dxx.]

- Aczél, J. (with Fischer, Pal; Kados, Peter) General solution of an inequality containing several unknown functions, with applications to the generalized problem of "how to keep the expert honest". (82g:39009)
 Brydak, Dobiesław A generalization of theorems concerning a nonlinear functional inequality in a single variable. (82d:39006)
 Fischer, Pal See Aczél, J.; et al., (82g:39009)
 Ger, Roman Homogeneity sets for Jensen-convex functions. (82d:39007)
 Kados, Peter On a functional inequality. (82d:39008)
 See also Aczél, J.; et al., (82g:39009)
 Pachpatte, B. G. On some fundamental n th order finite difference inequalities. (82g:39010)
 Popenda, Jerzy (with Werbowski, Jarosław) On the discrete analogy of Gronwall lemma. (82g:39011)
 Snow, Donald R. A functional inequality arising in combinatorics. (82e:39008)
 Werbowski, Jarosław See Popenda, Jerzy, (82g:39011)

secondary classifications:

- Aczél, J. A mixed theory of information. V. How to keep the (inset) expert honest. (82d:94027)
 Aširov, S. See Mamedov, Ja. D.; et al., (82i:26011)
 Atdaev, S. See Mamedov, Ja. D.; et al., (82i:26011)
 Baron, Karol On a majorization of distances between the values of a family of functions and a fixed point. (82m:39002)
 Boyarsky, Abraham (with Cooper, Sarah) Weak continuity of invariant measures for a class of piecewise monotonic transformations. (82b:28033)
 Choczewski, Bogdan (with Powązka, Zbigniew) Generalized subadditivity and convexity. (82d:26006)
 Cooper, Sarah See Boyarsky, Abraham, (82b:28033)
 Malec, Marian Un analogue aux différences finies des inégalités différentielles faibles du type parabolique avec des conditions aux limites non linéaires. (English and Russian summaries) (82b:39004)
 Mamedov, Ja. D. (with Aširov, S.; Atdaev, S.) ★Теоремы о неравенствах. (Russian) [Theorems on inequalities] (82i:26011)
 Pachpatte, B. G. See Singare, V. M., (82e:26016)
 Powązka, Zbigniew See Choczewski, Bogdan, (82d:26006)
 Singare, V. M. (with Pachpatte, B. G.) Lower bounds on some integral inequalities in n independent variables. (82e:26016)
 Wang, Chung Lie Functional equation approach to inequalities. II. (82j:26021a)
 Functional equation approach to inequalities. III. (82j:26021b)

40-XX SEQUENCES, SERIES, SUMMABILITY**40-01 Elementary exposition, textbooks**

- Dence, Thomas P. On the monotonicity of a class of exponential sequences. (82i:40001)
 Fricker, François Zur Begründung der Exponentialfunktion über Folgen. (82b:40001)

secondary classifications:

- Efimov, A. V. ★Математический анализ (специальные разделы). Часть I. (Russian) [Mathematical analysis (special sections). Part I] (82c:00001a)

40-02 Advanced exposition (research surveys, monographs, etc.)**40-03 Historical (must also be assigned at least one classification number from Section 01)**

- Golovinskii, I. A. Laplace interpolation series. (Russian) (82e:40001)

secondary classifications:

- Costabel, Pierre Leibniz et les séries numériques. (82m:01030)
 Petrova, S. S. (with Romanowska, D. A.) On the history of the discovery of Taylor series. (Russian) (82f:01033)
 Romanowska, D. A. See Petrova, S. S., (82f:01033)
 Stalić, Predrag A discovery of Euler and some of its consequences. (Serbo-Croatian) (82f:01041)

40-04 Explicit machine computation and programs (not the theory of computation or programming)**40-06 Proceedings, conferences, etc.****40Axx Convergence and divergence of infinite limiting processes****40A05 Convergence and divergence of series and sequences**

- Arora, J. P. See Mittal, S. C.; et al., (82m:40003)
 Bajraktarević, Mahmud Quelques remarques sur la vitesse de convergence d'une suite par rapport à ses suites partielles. (82m:40001)

- Boas, R. P. Convergence, divergence, and the computer. (See 82e:00006)
 Cowen, Carl C. (with Davidson, Kenneth R.; Kaufman, Robert P.) Rearranging the alternating harmonic series. (82b:40002)
 D'Apuzzo, Livia On the convergence of real series with nonnegative terms. (Italian. English summary) (82a:40001)
 Davidson, Kenneth R. See Cowen, Carl C.; et al., (82b:40002)
 Ionisjan, S. I. (with Privalov, A. A.) Divergence of a sequence of linear operations on a set of second category. (Russian) (82a:40002)
 Kaufman, Robert P. See Cowen, Carl C.; et al., (82b:40002)
 Mittal, S. C. (with Sinha, Rajiv; Arora, J. P.) On the degree of approximation. (82m:40003)
 Privalov, A. A. See Ionisjan, S. I., (82a:40002)
 Raina, B. K. Generalized Taylor's series and summation. (82m:40002)
 Singmaster, David On the asymptotic behavior of $\sum (n+t)^s x^n$ as $x \uparrow 1$. (82c:40001)
 Sinha, Rajiv See Mittal, S. C.; et al., (82m:40003)
 Tandori, Károly Über modifizierte Lebesguesche Funktionen. (82g:40001)
 Zaimi, S. Zahid Ali A note on quasimonotone series. (Turkish summary) (82i:40002)

secondary classifications:

- Coleman, J. P. Divergence rules OK? (82a:41027)
 Cvil, M. M. Double Faber series. (Russian) (82b:40003)
 Gawronski, Wolfgang (with Shawyer, B. L. R.; Trautner, Rolf) A Banach space version of Okada's theorem on summability of power series. (82d:40005)
 Móricz, F. On the convergence in a restricted sense of multiple series. (Russian summary) (82i:40003)
 The Kronecker lemmas for multiple series and some applications. (82f:40007)
 Schaefer, Paul Sum-preserving rearrangements of infinite series. (82j:05003)
 Shawyer, B. L. R. See Gawronski, Wolfgang; et al., (82d:40005)
 Smart, D. R. When does $T^{n+1}x - T^n x \rightarrow 0$ imply convergence? (82d:54056)
 Trautner, Rolf See Gawronski, Wolfgang; et al., (82d:40005)

40A10 Convergence and divergence of integrals

secondary classifications:

- Thorpe, B. A Cauchy criterion for the summability of an infinite integral. (82a:26010)
 Wallas Cuadrado, Magdalena Note on the Marcinkiewicz integral. (Spanish) (82a:42016)

40A15 Convergence and divergence of continued fractions [See also 30B70.]

- Bodnar, D. I. Analogue of the Worpitzky test of convergence for branching continued fractions. (Ukrainian. Russian summary) (82e:40002)
 Necessary and sufficient condition for convergence of branching continued fractions with positive terms. (Russian) (82m:40004)
 Bodnarcuk, P. I. (with İvanel, V. K.) Operations on a type of branching continued fractions. (Ukrainian. Russian summary) (82b:40003)
 İvanel, V. K. See Bodnarcuk, P. I., (82b:40003)
 Kučmins'ka, H. I. The branching continued fraction corresponding to a double power series. (Ukrainian. Russian summary) (82f:40001)
 Mihaľčuk, R. I. A test of convergence of integral continued fractions. (Ukrainian. Russian summary) (82f:40002)
 Nedaskov's'kii, M. O. Convergence and computational stability of branching continued fractions with elements satisfying conditions of Pringsheim type. (Ukrainian. Russian summary) (82f:40003)

secondary classifications:

- Batut, Christian (with Olivier, Michel) Sur l'accélération de la convergence de certaines fractions continues. (82b:10041)
 Edgar, Hugh See Thoro, Dmitri, (82b:10014)
 Garg, Kumkum (with Singh, Harpreet) Inversion of a 2D continued fraction. (82i:93019)
 Gill, John Convergence factors for continued fractions $K(a_n/1)$, $a_n \rightarrow 0$. (82k:30006)
 Gragg, William B. Truncation error bounds for T -fractions. (82g:30011)
 Olivier, Michel See Batut, Christian, (82b:10041)
 Singh, Harpreet See Garg, Kumkum, (82i:93019)
 Thoro, Dmitri (with Edgar, Hugh) Exploring an algorithm. (82b:10014)
 Van der Cruyssen, P. Linear difference equations and generalized continued fractions. (German summary) (82e:65129)

40A20 Convergence and divergence of infinite products

secondary classifications:

- Stolarsky, Kenneth B. Mapping properties, growth, and uniqueness of Vieta (infinite cosine) products. (82a:30054)

40A25 Approximation to limiting values (summation of series, etc.) {For the Euler-Maclaurin summation formula, see 65B15.}

- Phillip, J. R. The symmetrical Euler-Maclaurin summation formula. (82g:40002)

40A30 Convergence and divergence of series and sequences of functions

- Anderson, James Milne (with Newman, Donald J.) On the coefficients of lacunary power series. (82e:40003)
 Antosik, P. Sequences of mappings. (Russian) (82d:40001)
 Dravecký, Jozef See Šalát, Tibor, (82f:40004)
 Grundhöfer, Theo (with Lüneburg, Heinz) Über die Summation von Reihen aus linearen Schieberegisterfolgen. (82c:40002)

- Kornilov, P. A. Rearrangements of conditionally convergent functional series. (Russian) **82b:40004**
- Kratz, W. (with Trautner, Rolf) Zur Konvergenz von Funktionenreihen. **82d:40002**
- Lüneburg, Heinz See Grundhöfer, Theo, **82c:40002**
- Newman, Donald J. See Anderson, James Milne, **82c:40003**
- Riekstins, E. ★Обертывающие ряды. I. (Russian) [Enveloping series. I] **82b:40001a**
- ★Обертывающие ряды. II. (Russian) [Enveloping series. II] **82b:40001b**
- Šalát, Tibor (with Dravecký, Jozef) On a certain type of convergence. (Slovak and Russian summaries) **82f:40004**
- Trahan, Donald H. Regions of convergence for a generalized Lambert series. **82c:40004**
- Trautner, Rolf See Kratz, W., **82d:40002**

secondary classifications:

- Creutz, Michael (with Sternheimer, R. M.) On the convergence of iterated exponentiation. I. **(82b:26006)**
- Sternheimer, R. M. See Creutz, Michael, **(82b:26006)**
- Swaminathan, V. On the (S, f, α_n) method of summability. **(82i:40010)**
- Tandori, Károly Convergence of series of functions. (Hungarian) **(82d:42022)**
- Viskov, O. V. Power series inversion and the Lagrange formula. (Russian) **(82d:30002)**

40A99 None of the above, but in this section

- Bhattacharyya, S. K. (with Lahiri, B. K.) On subseries of series. **82a:40003**
- Feeke, Ralph Convergence properties of linear recursion sequences. **82j:40001**
- Lahiri, B. K. See Bhattacharyya, S. K., **82a:40003**
- Maddox, Ivor J. (with Willey, M. A. L.) Multiplication on the generalized entire sequences. **82f:40005**
- Willey, M. A. L. See Maddox, Ivor J., **82f:40005**
- Zhou, Xing Wei A problem in I_2 . (Chinese. English summary) **82m:40005**

secondary classifications:

- Chung, F. R. K. (with Graham, Ronald L.) On irregularities of distribution of real sequences. **(82g:10076)**
- Cusumari, Adolf A proof of the arithmetic mean-geometric mean inequality. **(82g:26024)**
- Graham, Ronald L. See Chung, F. R. K., **(82g:10076)**
- Joni, S. A. Umbralized umbral operators. **(82e:05015)**

40B05 Multiple sequences and series (should also be assigned at least one other classification number in this section)

- Civil, M. M. Double Faber series. (Russian) **82g:40003**
- Janušauskas, A. I. ★Двойные ряды. (Russian) [Double series] **82f:40006**
- Móricz, F. On the convergence in a restricted sense of multiple series. (Russian summary) **82c:40003**
- The Kronecker lemmas for multiple series and some applications. **82f:40007**

secondary classifications:

- Gupta, Manjul (with Kamthan, P. K.) Infinite matrices and tensorial transformations. **(82i:46014)**
- Kamthan, P. K. See Gupta, Manjul, **(82i:46014)**
- Móricz, F. On the growth order of the rectangular partial sums of multiple nonorthogonal series. (Russian summary) **(82g:42022)**

40Cxx General summability methods

40C05 Matrix methods

- Ahmad, Z. U. (with Saraswat, S. K.; Mursaleen) Invariant means and multiplicative matrices. (Turkish summary) **82i:40004**
- Beekmann, Wolfgang (with Chang, Shao Chien) Some summability invariants. **82b:40005**
- Chandrasekhara Rao, K. Convolution of summability methods. **82a:40004a**
- Errata: "Convolution of summability methods". **82a:40004b**
- Chang, Shao Chien See Beekmann, Wolfgang, **82b:40005**
- Dawson, David F. An addendum to: "Matrix maps of null sequences" [Rend. Mat. (6) 9 (1976), no. 2, 207-214; MR 53 #13914]. (Italian summary) **82d:40003**
- Fridy, John A. A simple proof of the Mazur-Orlicz summability theorem. **82d:40004**
- Gawronski, Wolfgang (with Shawyer, B. L. R.; Trautner, Rolf) A Banach space version of Okada's theorem on summability of power series. **82d:40005**
- Keagy, Thomas A. Absolute summability and stretchings of sequences. **82j:40002**
- Summability of matrix transforms of subsequences. **82i:40001**
- Khan, F. M. (with Riazuddin, M.) Matrix transformation of sequences of bounded variation. **82j:40003**
- Kuttner, B. (with Maddox, Ivor J.) Matrices which sum all bounded Cesàro summable sequences. **82f:40008**
- Macphail, M. S. A summability problem. **82d:40006**
- Maddox, Ivor J. See Kuttner, B., **82f:40008**
- Mayes, Vivienne (with Rhoades, B. E.) Some properties of the Leininger generalized Hausdorff matrix. **82c:40005**
- Mursaleen Infinite matrices and general boundedness. (Turkish summary) **82g:40004**
- See also Ahmad, Z. U.; et al., **82i:40004**
- Qureshi, K. A class of continuous functions and their degree of approximation. **82j:40004**
- Rhoades, B. E. See Mayes, Vivienne, **82c:40005**
- Riazuddin, M. See Khan, F. M., **82j:40003**
- Saraswat, S. K. See Ahmad, Z. U.; et al., **82i:40004**
- Shawyer, B. L. R. See Gawronski, Wolfgang; et al., **82d:40005**
- Tanaka, Minoru Limitation theorems for some methods of summability. **82c:40003**
- Trautner, Rolf See Gawronski, Wolfgang; et al., **82d:40005**

secondary classifications:

- Ahmad, Z. U. (with Saraswat, S. K.) Absolute convexity in the spaces of strongly α -summable sequences. **(82g:46020)**
- Antoni, Jozef (with Šalát, Tibor) On the A -continuity of real functions. (Slovak and Russian summaries) **(82b:26004)**
- Borwein, David (with Cass, F. P.) Weighted means, generalised Hausdorff matrices and the Borel property. **(82f:40011)**
- Bulut, E. Continuous operators on paranormed spaces and matrix transformations of strong Cesàro summable sequences. (Turkish summary) **(82k:46009)**
- Cass, F. P. (with Trautner, Rolf) On relations between strong and ordinary summability. **(82g:40008)**
- See also Borwein, David, **(82f:40011)**
- Freedman, A. R. (with Sember, J. J.) Densities and summability. **(82m:10081)**
- Janušauskas, A. I. ★Двойные ряды. (Russian) [Double series] **(82f:40006)**
- Jena, S. C. Absolute matrix summability of an associated Fourier series. **(82b:40007)**
- Keagy, Thomas A. Summability of alterations of convergent series. **(82g:40006)**
- Maddox, Ivor J. Generalized Köthe-Toeplitz duals. **(82a:46009)**
- Prasad, Rajendra (with Saxena, Ashok K.) On the uniform matrix summability of Fourier series. **(82h:42014)**
- Šalát, Tibor See Antoni, Jozef, **(82b:26004)**
- Saraswat, S. K. See Ahmad, Z. U., **(82g:46020)**
- Saxena, Ashok K. See Prasad, Rajendra, **(82h:42014)**
- Sember, J. J. See Freedman, A. R., **(82m:10081)**
- Siddiqi, Rafat Nabi A note on a theorem of Fejér. **(82d:42007)**
- Srivastava, R. S. L. Summability of Fourier series by a class of regular methods. **(82j:42007)**
- Swaminathan, V. On the (S, f, α_n) method of summability. **(82i:40010)**
- Trautner, Rolf See Cass, F. P., **(82g:40008)**

40C10 Integral methods

secondary classifications:

- Zinov'ev, B. S. An algebraic method of convolution of series of several complex variables and some integral formulas. (Russian) **(82c:32004)**

40C15 Function-theoretic methods (including power series methods and semicontinuous methods)

secondary classifications:

- Fridy, John A. (with Powell, Robert E.) Tauberian theorems for matrices generated by analytic functions. **(82j:40006)**
- Iseki, Kaneshiro On the summation of linearly ordered series. **(82k:26005)**
- Powell, Robert E. See Fridy, John A., **(82j:40006)**

40C99 None of the above, but in this section

40Dxx Direct theorems on summability

40D05 General theorems

- Davidov, M. O. (with Mihalin, G. O.) Kernels of bounded sequences. (Russian) **82c:40004**
- Holševnikova, N. N. See Mal'vin, V. I., **82c:40005**
- Mal'vin, V. I. (with Holševnikova, N. N.) Independence of two set-theoretic statements in summation theory. (Russian) **82c:40005**
- Mihalin, G. O. See Davidov, M. O., **82c:40004**
- Pelling, M. J. Generalisation of a classical theorem on series. (Serbo-Croatian summary) **82g:40005**

secondary classifications:

- Chandrasekhara Rao, K. Convolution of summability methods. **(82a:40004a)**
- Errata: "Convolution of summability methods". **(82a:40004b)**
- Fricke, Gerd H. (with Roy, Ranjan; Shah, Shantilal M.) Bounded index, entire solutions of ordinary differential equations and summability methods. **(82i:30040)**
- Roy, Ranjan See Fricke, Gerd H.; et al., **(82i:30040)**
- Shah, Shantilal M. See Fricke, Gerd H.; et al., **(82i:30040)**
- Tanaka, Minoru Limitation theorems for some methods of summability. **(82c:40003)**

40D09 Structure of summability fields

secondary classifications:

- Beekmann, Wolfgang (with Chang, Shao Chien) Some summability invariants. **(82b:40005)**
- Chang, Shao Chien See Beekmann, Wolfgang, **(82b:40005)**
- Nagaitik, A. F. Absolute summability of sequences by double methods. (Russian) **(82b:40009)**

40D10 Tauberian constants and oscillation limits

- Fridy, John A. An addendum to: "Tauberian theorems via block dominated matrices" [Pacific J. Math. **81** (1979), no. 1, 81-91; MR 80g:40007]. **82a:40005**
- Johansson, Bo A general high indices theorem with an application to a conjecture by Rényi. **82c:40006**

40D15 Convergence factors and summability factors

- Ahmad, Z. U. (with Khan, F. M.) Absolute Nörlund summability factors of infinite series

with applications. **82m:40006**

Dawson, David F. Summability factors for certain sequence spaces. **82f:40009**

Khan, F. M. See Ahmad, Z. U., **82m:40006**

Singh, Tikam A note on $[N, p_n]$ summability factors for infinite series. **82h:40002**

secondary classifications:

Chandra, Prem On the absolute Riesz summability factors for Fourier series and conjugate series. **(82h:42006)**

Kuttner, B. Absolute summability functions for Hausdorff methods. **(82m:40010)**

40D20 Summability and bounded fields of methods

secondary classifications:

Atalla, Robert E. Generalized Markov projections and matrix summability. **(82h:47033)**

Maddox, Ivor J. \star Infinite matrices of operators. **(82c:40012)**

Thorpe, B. An extension of Kuttner's theorem. **(82h:40013)**

40D25 Inclusion and equivalence theorems

Anzai, Kazuo (with Koizumi, Sumiyuki; Matsuoka, Katsuo) On the Wiener formula of functions of two variables. **82d:40007**

Bingham, N. H. Tauberian theorems and the central limit theorem. **82f:40010**

Defranza, J. An ordered set of Nörlund means. **82h:40003**

Koizumi, Sumiyuki See Anzai, Kazuo; et al., **82d:40007**

Mahapatra, P. C. A note on Riesz mean. **82a:40006**

Matsuoka, Katsuo See Anzai, Kazuo; et al., **82d:40007**

Parameswaran, Mangalam R. A converse product theorem in summability. **82d:40008**

secondary classifications:

Bustoz, J. On absolute Euler-Knopp and de la Vallée Poussin summability. **(82d:40011)**

40D99 None of the above, but in this section

Borwein, David (with Cass, F. P.) Weighted means, generalised Hausdorff matrices and the Borel property. **82f:40011**

Cass, F. P. See Borwein, David, **82f:40011**

Das, Gokulananda (with Mishra, S. K.) A note on a theorem of Maddox on strong almost convergence. **82d:40009**

Keagy, Thomas A. Summability of alterations of convergent series. **82g:40006**

Mishra, S. K. See Das, Gokulananda, **82d:40009**

Müller, Gerhard Otto (with Trautner, Rolf) Fatou-Riesz theorems in general sequence spaces. **82c:40006**

Trautner, Rolf See Müller, Gerhard Otto, **82c:40006**

secondary classifications:

Al-Madi, Azmi K. On translitivity of the product of Riesz summability methods. **(82c:40008)**

40Exx Inversion theorems

40E05 Tauberian theorems, general

Borwein, David Tauberian conditions for the equivalence of weighted mean and power series methods of summability. **82m:40007**

Čížek, Jiří On Tauberian constants for the (D, λ) summability. **82d:40010**

Drasin, D. On equality in convolution inequalities. **82c:40007**

Fridy, John A. (with Roberts, K. L.) Some Tauberian theorems for Euler and Borel summability. **82a:40007**

Geluk, J. L. II-regular variation. **82h:40004**

Jeyarajan, P. A. Addendum and corrigendum: "A Tauberian theorem for the generalised Abel method of summability. II" [Indian J. Math. 14 (1972), 9-14; MR 48 #9169]. **82h:40005**

Luther, Wolfram Taubersche Restgliedsätze für eine Klasse von Fourierkernen. **82a:40008**

Maravić, Manojlo Sur certaines applications des fonctions à croissance lente avec reste. (Serbo-Croatian summary) **82c:40007**

Meĭnik, V. I. A Tauberian theorem in the L metric for convolution transformations. (Russian) **82c:40008**

Postnikov, A. G. Tauberian theory and its applications. (Russian) **82f:40012a**

Tauberian theory and its applications. **82f:40012b**

Roberts, K. L. See Fridy, John A., **82a:40007**

Varshney, O. P. On a Tauberian theorem for absolute Nörlund summability. **82c:40009**

secondary classifications:

Anzai, Kazuo (with Koizumi, Sumiyuki; Matsuoka, Katsuo) On the Wiener formula of functions of two variables. **(82d:40007)**

Bingham, N. H. Tauberian theorems and the central limit theorem. **(82f:40010)**

Borwein, David (with Watson, Bruce B.) On the relation between the logarithmic and Borel-type summability methods. **(82g:40010)**

Fainleib, A. S. Tauberian theorems and mean values of multiplicative functions. (Russian. English summary) **(82i:10058)**

Freedon, Willi See Müller, Claus, **(82d:10071)**

Fridy, John A. (with Powell, Robert E.) Tauberian theorems for matrices generated by analytic functions. **(82j:40006)**

Geluk, J. L. An Abel-Tauber theorem for partitions. **(82k:10066)**

Gripenberg, Gustaf A Tauberian problem for a Volterra integral operator. **(82h:45003)**

Jakymiv, A. L. Multidimensional Tauberian theorems and their application to

Bellman-Harris branching processes. (Russian) **(82m:60103)**

Koizumi, Sumiyuki See Anzai, Kazuo; et al., **(82d:40007)**

Matsuoka, Katsuo See Anzai, Kazuo; et al., **(82d:40007)**

Mihailin, G. O. A property of a class of Stieltjes integrals. (Russian) **(82m:26012)**

Müller, Claus (with Freedon, Willi) Multidimensional Euler and Poisson summation formulas. **(82d:10071)**

Powell, Robert E. See Fridy, John A., **(82j:40006)**

Tietz, Hubert Zur pV -summierung durch Riesz-Verfahren. (English summary) **(82c:40011)**

Watson, Bruce B. See Borwein, David, **(82g:40010)**

40E10 Growth estimates

secondary classifications:

Postnikov, A. G. Tauberian theory and its applications. (Russian) **(82f:40012a)**

Tauberian theory and its applications. **(82f:40012b)**

Stadtmüller, U. (with Trautner, Rolf) Tauberian theorems for Laplace transforms in dimension $D > 1$. **(82i:44001)**

Trautner, Rolf See Stadtmüller, U., **(82i:44001)**

40E15 Lacunary inversion theorems

40E20 Tauberian constants

40E99 None of the above, but in this section

Goldie, Charles M. (with Trustum, G. B.) On slow decrease. **82h:40006**

Trustum, G. B. See Goldie, Charles M., **82h:40006**

secondary classifications:

Labelle, G. Sur l'inversion et l'itération continue des séries formelles. (English summary) **(82a:05003)**

40F05 Absolute and strong summability

Ahmad, Z. U. (with Begum, B. J.) On $[N, p_n]$ -summability factors of infinite series with applications. **82g:40007**

(with Parashar, Vinod K.) On $[R, p]_k$ and $|A|_k$ summability methods. **82m:40008**

Begum, B. J. See Ahmad, Z. U., **82g:40007**

Cass, F. P. (with Trautner, Rolf) On relations between strong and ordinary summability. **82g:40008**

Endl, Kurt Beitrag zur Theorie der starken Summierbarkeit mit einer Anwendung auf Orthonormalreihen. **82g:40009**

Jena, S. C. Absolute matrix summability of an associated Fourier series. **82h:40007**

Kuz'mič, V. I. On absolute summation of series by the Rogosinski-Bernstein method. (Russian) **82h:40008**

Leindler, László On the strong summability and approximation of orthogonal series. **82i:40005**

Mishra, Babhan Prasad A theorem on strong summability. **82j:40005**

Mursaleen On strongly F_2 -summable sequences. (Turkish summary) **82i:40006**

Nagainik, A. F. Absolute summability of sequences by double methods. (Russian) **82h:40009**

Parashar, Vinod K. See Ahmad, Z. U., **82m:40008**

Slipenčuk, K. M. Strong summability in the degree p of a series connected with the differentiated Fourier series by Abel's method. (Russian) **82a:40009**

Sukla, I. On inclusion relation between absolute Riesz and Nörlund means. **82i:40007**

Trautner, Rolf See Cass, F. P., **82g:40008**

secondary classifications:

Dikshit, G. D. (with Rees, Charles Sparks) Absolute Riesz summability of Fourier series. I. **(82k:42007)**

Ganguly, Ashok See Jain, Rajendra Kumar, **(82h:40010)**

Jain, Rajendra Kumar (with Ganguly, Ashok) On some relations between strong and ordinary almost Borel-type methods of summability. **(82h:40010)**

Kuttner, B. (with Thorpe, B.) A note on strong Cesàro summability. **(82m:40009)**

Maravić, Manojlo Summability of derived multiple Fourier series related to slowly oscillating functions with remainder term. (Serbo-Croatian summary) **(82k:42012)**

Mishra, K. K. (with Sharma, Krishna Gopal) On strong summability of ultraspherical series. **(82h:33013)**

Rees, Charles Sparks See Dikshit, G. D., **(82k:42007)**

Saraswat, S. K. Some sequence spaces and generalized almost boundedness. **(82j:46009)**

Schwin, Hans Über die Konvergenz und Summierbarkeit von Teilfolgen allgemeiner

Orthogonalreihen. **(82f:42021)**

Sharma, Krishna Gopal See Mishra, K. K., **(82h:33013)**

Thorpe, B. See Kuttner, B., **(82m:40009)**

40Gxx Special methods of summability

40G05 Cesàro, Euler, Nörlund and Hausdorff methods

Ahmad, Z. U. (with Parashar, Vinod K.) A note on total regularity of the Riemann-Cesàro summability. **82k:40002**

Aljančić, S. Abel- und Mercer-Sätze mit Restglied. **82c:40010**

Al-Madi, Azmi K. On translitivity of the product of Riesz summability methods. **82c:40008**

Asatiani, V. O. (with Čanturija, Z. A.) On absolute Cesàro summability of Fourier series.

- (Russian. Georgian and English summaries) **82c:40011**
 Avad, Laila S. Summation of the product of two numerical series by the Cesàro method. (Russian. English summary) **82c:40012**
 Bhatt, Shri Nivas On the absolute Nörlund summability of Laplace series. **82b:40006**
 Čanturija, Z. A. See Asatiani, V. O., **82c:40011**
 Fridy, John A. (with Powell, Robert E.) Tauberian theorems for matrices generated by analytic functions. **82j:40006**
 Kishore, Nand (with Misra, U. K.) On the consistency of limitation methods for (N, p_n) summable sequences. **82c:40008**
 Kuttner, B. (with Thorpe, B.) A note on strong Cesàro summability. **82m:40009**
 Absolute summability functions for Hausdorff methods. **82m:40010**
 Lal, Shiva Narain (with Ram, Siya) The absolute summability of infinite integrals by functional Nörlund methods. **82c:40009**
 Leibowitz, Gerald Some Hausdorff sequence spaces. **82c:40009**
 Misra, U. K. See Kishore, Nand, **82c:40008**
 Parashar, Vinod K. See Ahmad, Z. U., **82c:40002**
 Powell, Robert E. See Fridy, John A., **82j:40006**
 Ram, Siya See Lal, Shiva Narain, **82c:40009**
 Thorpe, B. See Kuttner, B., **82c:40009**
 Tripathy, N. Application of absolute Hausdorff means to Fourier series. **82f:40013**
 Limitation theorems for Hausdorff means. **82j:40007**
- secondary classifications:
- Ahmad, Z. U. (with Khan, F. M.) Absolute Nörlund summability factors of infinite series with applications. **(82m:40006)**
 (with Begum, B. J.) On $|N, p_n|$ -summability factors of infinite series with applications. **(82g:40007)**
 Ali, Ziad Rushdi Nörlund summability of conjugate Fourier series. **(82h:42012)**
 Asatiani, V. O. On absolute Cesàro summability of the Fourier series of the class $H^{\alpha} \cap V[\nu]$. (Russian. Georgian and English summaries) **(82f:42008)**
 Begum, B. J. See Ahmad, Z. U., **(82g:40007)**
 Das, Gokulananda (with Mohapatra, P. C.) Necessary and sufficient conditions for absolute Nörlund summability of Fourier series. **(82c:42007)**
 Defranza, J. An ordered set of Nörlund means. **(82h:40003)**
 Dikshit, G. D. Absolute Nörlund summability factors of a Fourier series. **(82c:42006)**
 Falaleev, L. P. Approximation of conjugate functions by Cesàro sums. (Russian) **(82d:42006)**
 ul-Haq, Fazl On uniform Nörlund summability of the conjugate derived Fourier series. **(82j:42012)**
 Jena, S. C. See Kishore, Nand, **(82c:42010)**
 Khan, F. M. See Ahmad, Z. U., **(82m:40006)**
 Kishore, Nand (with Jena, S. C.) Absolute Nörlund summability of a Fourier series and its conjugate series. **(82c:42010)**
 Kuttner, B. (with Maddox, Ivor J.) Matrices which sum all bounded Cesàro summable sequences. **(82f:40008)**
 Lal, Shiva Narain On the absolute Nörlund summability factors of a Fourier series. **(82m:42009)**
 (with Singh, Awadhesh Kumar) Absolute Nörlund summability of Fourier integrals. **(82d:42005)**
 (with Singh, K. N.) Allied integral and absolute functional Nörlund method of summability. **(82f:42010)**
 (with Singh, K. N.) On the absolute summability of weighted Fourier series by Nörlund means. **(82m:42008)**
 Maddox, Ivor J. See Kuttner, B., **(82f:40008)**
 Mahapatra, P. C. A note on Riesz mean. **(82a:40006)** See Das, Gokulananda, **(82c:42007)**
 Prasad, Kanhaiya On the $(N, p_n)C_1$ summability of a sequence of Fourier coefficients. **(82g:42004)**
 Prasad, Rajendra (with Saxena, Ashok K.) Uniform matrix summability of Fourier series. **(82j:42005)**
 See also Saxena, Ashok K., **(82j:42006)**
 Qureshi, K. On the degree of approximation of functions belonging to the Lipschitz class by means of a conjugate series. **(82k:42005)**
 Rempulska, Lucyna On the (A, p) -summability of orthonormal series. **(82c:42023)**
 Rhoades, B. E. Some sequence spaces which include the l^p spaces. **(82i:46016)**
 Safarov, T. M. Generalization of a Fatou-Korevaar theorem. (Russian) **(82g:30007)**
 Saxena, Ashok K. (with Prasad, Rajendra) On the summabilities of the derived series of the Fourier series. **(82j:42006)**
 See also Prasad, Rajendra, **(82j:42005)**
 Saxena, R. B. Degree of approximation of a function by Nörlund means of its Fourier series. **(82k:42001)**
 Schwinn, Hans Über die Konvergenz und Summierbarkeit von Teilfolgen allgemeiner Orthogonalreihen. **(82f:42021)**
 Singh, A. P. See Tripathi, L. M., **(82g:42012)**
 Singh, Awadhesh Kumar See Lal, Shiva Narain, **(82d:42005)**
 Singh, K. N. See Lal, Shiva Narain, **(82f:42010)** and **(82m:42008)**
 Sukla, I. On inclusion relation between absolute Riesz and Nörlund means. **(82i:40007)**
 Tripathi, L. M. (with Singh, A. P.) A study of double Fourier series by Nörlund summability. **(82g:42012)**
 Tripathy, N. Some theorems concerning the absolute Hausdorff summability of Fourier series and allied series. **(82c:42008)**
 Varshney, O. P. On a Tauberian theorem for absolute Nörlund summability. **(82c:40009)**

40G10 Abel, Borel and power series methods

- Borwein, David (with Watson, Bruce B.) On the relation between the logarithmic and Borel-type summability methods. **82g:40010**
 Davidov, M. O. (with Lotockii, V. A.) On the kernel of Borel means. (Russian) **82f:40014**
 Ganguly, Ashok See Jain, Rajendra Kumar, **82h:40010**

- Jain, Rajendra Kumar (with Ganguly, Ashok) On some relations between strong and ordinary almost Borel-type methods of summability. **82h:40010**
 Lotockii, V. A. See Davidov, M. O., **82f:40014**
 Singh, Vikramaditya (with Sinha, S. R.) On the Borel summability of the double Fourier series. **82c:40010**
 Sinha, S. R. See Singh, Vikramaditya, **82c:40010**
 Watson, Bruce B. See Borwein, David, **82g:40010**

secondary classifications:

- Elekli, V. L. See Popov, V. S.; et al., **(82c:81032)**
 Jaju, R. P. See Tivari, B. M. L., **(82c:44004)**
 Jakimovski, Amnon (with Meyer-König, W.; Zeller, K.) Power series methods of summability: positivity and gap perfectness. **(82g:40011)**
 Johansson, Bo A general high indices theorem with an application to a conjecture by Rényi. **(82c:40006)**
 Kazakov, D. I. A method of summing sign-constant asymptotic series. (Russian. English summary) **(82c:41025)**
 Kazarjan, K. S. Abel summation of subsystems of a trigonometric system in the spaces $L^p(\mu)$, $1 \leq p < \infty$. (Russian. Armenian summary) **(82g:42003)**
 Lorch, Lee The Lebesgue constants for Borel summation of Laplace series. **(82h:42031)**
 Meyer-König, W. See Jakimovski, Amnon; et al., **(82g:40011)**
 Mishra, Babban Prasad A theorem on strong summability. **(82j:40005)**
 Popov, V. S. (with Elekli, V. L.; Turbiner, A. V.) Higher orders of perturbation theory and summation of series in quantum mechanics and field theory. **(82c:81032)**
 Rempulska, Lucyna On the (A, p) -summability of orthonormal series. **(82c:42023)**
 Tivari, B. M. L. (with Jaju, R. P.) On the inversion operator function of a generalised convolution transform involving Hermite polynomial in its kernel. **(82c:44004)**
 Turbiner, A. V. See Popov, V. S.; et al., **(82c:81032)**
 Zeller, K. See Jakimovski, Amnon; et al., **(82g:40011)**

40G99 None of the above, but in this section

- Bustoz, J. On absolute Euler-Knopp and de la Vallée Poussin summability. **82d:40011**
 Cuzick, Jack Riemann R_1 -summability of independent, identically distributed random variables. **82j:40008**
 Ganapathy, M. K. See Swaminathan, V., **82h:40012b**
 Lah, Wolfgang The intersection of Gronwall methods and Jakimovski methods. **82c:40003**
 Mishra, Babban Prasad Some theorems concerning the absolute summability of infinite series. **82h:40011**
 Swaminathan, V. On the (S, f, α_n) method of summability. **82i:40010**
 A note on the $[5, f(x)]$ means. **82h:40012a**
 (with Ganapathy, M. K.) $[J, f(x)]$ summability of Legendre series. **82h:40012b**
 Tietz, Hubert Zur pV -Summierung durch Riesz-Verfahren. (English summary) **82c:40011**

secondary classifications:

- Agrawal, S. R. (with Patel, C. M.) On convergence and Riesz means of a series of Bessel functions. **(82i:42019)**
 Bhatt, Shri Nivas On $[L]$ summability of Laplace series. **(82i:42020)**
 Kuz'mič, V. I. On absolute summation of series by the Rogosinski-Bernstein method. (Russian) **(82h:40008)**
 Patel, C. M. See Agrawal, S. R., **(82i:42019)**
 Tanaka, Chuji On the boundary behavior of Taylor series of the regular functions of some classes in the unit circle. **(82f:30005)**

40H05 Functional analytic methods in summability

- Amurăritei, Gh. Sequences and series in topological algebras. (Romanian. French summary) **82k:40004**
 Jakimovski, Amnon (with Meyer-König, W.; Zeller, K.) Power series methods of summability: positivity and gap perfectness. **82g:40011**
 Maddox, Ivor J. ★ Infinite matrices of operators. **82c:40012**
 Meyer-König, W. See Jakimovski, Amnon; et al., **82g:40011**
 Mursaleen Invariant means and some matrix transformations. **82a:40010**
 Thorpe, B. An extension of Kuttner's theorem. **82h:40013**
 Zeller, K. See Jakimovski, Amnon; et al., **82g:40011**

40J05 Summability in abstract structures [See also 43A55, 46A35, 46B15.]

- Flachsmeyer, Jürgen (with Terpe, Frank) Summations as linear maps and as curves. **82c:40011**
 Iski, Kanesiroo A summation method for linearly ordered series. **82d:40012**
 Johnson, P. D., Jr. (with Mohapatra, Ram Narayan) Inequalities involving infinite matrices with nonnegative entries. **82i:40012**
 (with Mohapatra, Ram Narayan) Problems in the theory of infinite matrices. **82i:40013**
 Mohapatra, Ram Narayan See Johnson, P. D., Jr., **82i:40012** and **82i:40013**
 Natarajan, P. N. On a scale of summation processes in the p -adic field. **82h:40007**
 Terpe, Frank See Flachsmeyer, Jürgen, **82c:40011**

secondary classifications:

- Bjorn, Sten Summierbarkeitsbegriffe in Limesvektorräumen. **(82d:46010)**
 Freedman, A. R. Generalized limits and sequence spaces. **(82m:46006)**
 Găină, Stelian Sur un lemme de Kronecker. **(82a:46013)**
 Ganapathy Iyer, V. On the group of units in the ring of power series with coefficients in a commutative Banach algebra. **(82h:46066)**

- Langwitz, Detlef Verallgemeinerte Grenzwerte beschränkter Zahlfolgen. (82b:46015)
 Lee, Peng Yee Summability factors involving Orlicz metrics. (82m:46027)
 Maddox, Ivor J. Generalized Köthe-Toeplitz duals. (82a:46009)
 Ng, Peng Nung On a sequence space of nonabsolute type. (82b:46010)

41-XX APPROXIMATIONS AND EXPANSIONS {For all approximation theory in the complex domain, see 30E05 and 30E10; for all trigonometric approximation and interpolation, see 42A10 and 42A15; for numerical approximation, see 65Dxx.}

41-01 Elementary exposition, textbooks

- (Cheney, E. W.) See Xu, Xian Yu; et al., 82g:41001
 Holmes, Richard B. Applied approximation theory. 82b:41001
 Li, Jia See Xu, Xian Yu; et al., 82g:41001
 Powell, M. J. D. ★Approximation theory and methods. 82f:41001
 Rumjancev, I. A. ★Локальные методы интерполяции. (Russian) [Local methods of interpolation] 82f:41002
 Shi, Ying Guang See Xu, Xian Yu; et al., 82g:41001
 Watson, G. Alistair ★Approximation theory and numerical methods. 82e:41001
 Xiong, Gui Jing See Xu, Xian Yu; et al., 82g:41001
 Xu, Xian Yu (with Shi, Ying Guang; Li, Jia; Xiong, Gui Jing) Some notes on E. W. Cheney's book *Introduction to approximation theory* [McGraw-Hill, New York, 1966; MR 36 #5568]. (Chinese. English summary) 82g:41001

secondary classifications:

- (d'Alembert, J.) See Euler, Leonhard, (82h:01075)
 (Blanc, Charles) See Euler, Leonhard, (82h:01075)
 (Clairaut, Alexis-Claude) See Euler, Leonhard, (82h:01075)
 Euler, Leonhard ★Commercium epistolicum. [Correspondence] (82h:01075)
 (Grigor'jan, A. T.) See Euler, Leonhard, (82h:01075)
 (Habicht, Walter) See Euler, Leonhard, (82h:01075)
 (Juskeri, A. P.) See Euler, Leonhard, (82h:01075)
 (Lagrange, Joseph Louis) See Euler, Leonhard, (82h:01075)
 (Picolet, Guy) See Euler, Leonhard, (82h:01075)
 (Taton, René) See Euler, Leonhard, (82h:01075)

41-02 Advanced exposition (research surveys, monographs, etc.)

- Eisenberg, Sheldon M. Recent developments in approximation by Hermite-Fejér operators. 82e:41002
 Schempp, Walter Über einige geometrische Aspekte der Approximationstheorie. 82e:41001
 Schumaker, Larry L. ★Spline functions: basic theory. 82j:41001
 (Szász, P.) See Turán, Pál, 82e:41003
 Turán, Pál On some open problems of approximation theory. 82e:41003
 See also Papers: Turán's problems, 82e:41004
 Wimp, Jet Uniform scale functions and the asymptotic expansion of integrals. 82g:41002
 Papers:
 Turán's problems Recent papers dealing with Turán's problems. 82e:41004

41-03 Historical (must also be assigned at least one classification number from Section 01)

- Korevaar, J. Approximation by polynomials and rational functions. (Dutch) 82i:41001
 Lorentz, G. G. The work of P. Turán on interpolation and approximation. 82b:41002
 (Turán, Pál) See Lorentz, G. G., 82b:41002

41-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Channabasappa, M. N. The Bakhshali square-root formula and high speed computation. (82i:01013)

41-06 Proceedings, conferences, etc.

- (Držadić, V. K.) See Questions of the theory of the approximation of functions, 82f:41003
 (Korničuk, M. P.) See Questions of the theory of the approximation of functions, 82f:41003
 (Ziegler, Zvi) See Approximation theory and applications, 82d:41001
 Approximation theory and applications ★Approximation theory and applications. 82d:41001
 Haifa ★Approximation theory and applications. 82d:41001
 Questions of the theory of the approximation of functions ★Вопросы теории аппроксимации функций. (Russian) [Questions of the theory of the approximation of functions] 82f:41003
 Workshop:
 Approximation Theory and Applications ★Approximation theory and applications. 82d:41001

secondary classifications:

- (Beckenbach, Edwin F.) See General inequalities, (82b:00004)
 Approximation of functions by polynomials and splines ★Approximation of functions by polynomials and splines. (82e:00009)

Conference:

- General Inequalities ★General inequalities. 2. (82b:00004)
 Differential equations and their applications ★Дифференциальные уравнения и их приложения. (Russian) [Differential equations and their applications] (82k:73002)
 General inequalities ★General inequalities. 2. (82b:00004)
 Oberwolfach ★General inequalities. 2. (82b:00004)

41A05 Interpolation [See also 42A15 and 65D05.]

- Agarwal, Ravi P. Error estimates in polynomial interpolation. 82f:41004
 Baszenski, G. (with Posdorf, H.; Delves, F.-J.) Representation formulas for conforming bivariate interpolation. 82b:41003
 Berman, D. L. An everywhere divergent extended Krylov-Saerman interpolation process. (Russian) 82m:41001
 Bloom, Thomas Polynomial interpolation. 82b:41001
 Bojanic, R. Necessary and sufficient conditions for the convergence of the extended Hermite-Fejér interpolation process. 82f:41005
 Briggs, John (with Rubel, Lee A.) Interpolation by nonnegative polynomials. 82e:41005
 Byrnes, J. S. (with Shisha, Oved) The order of magnitude of unbounded functions and their degree of approximation by piecewise interpolating polynomials. 82d:41002
 Delves, F.-J. (with Posdorf, H.) On abstract Boolean interpolation. 82e:41002
 (with Posdorf, H.) A Boolean method in bivariate interpolation. 82j:41002
 See also Baszenski, G.; et al., 82b:41003
 Drols, Wolfgang On a problem of DeVore, Meir and Sharma. 82e:41003
 Eneshuany, S. A. N. On the derivative of interpolation polynomials. 82a:41001
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 (with Vértési, P.) Correction of some misprints in our paper: "On almost everywhere divergence of Lagrange interpolatory polynomials for arbitrary system of nodes". 82e:41006b
 Fu, Yen Tzu Interpolation by generalized polynomials. 82a:41002
 Gasca González, Mariano (with Maetz, J. I.) Interpolation in \mathbb{R}^n with mean values. (Spanish) 82a:41003
 Goodenough, S. J. (with Mills, T. M.) On interpolation polynomials of the Hermite-Fejér type II. 82k:41001
 (with Mills, T. M.) A new estimate for the approximation of functions by Hermite-Fejér interpolation polynomials. 82b:41002
 Goodman, T. N. T. Hermite-Birkhoff interpolation by Hermite-Birkhoff splines. 82g:41003
 Hakopian, Hakop Les différences divisées de plusieurs variables et les interpolations multidimensionnelles de types lagrangiens et hermitiens. (English summary) 82e:41004
 Haverkamp, Richard Approximationseigenschaften differenzierter Interpolationspolynome. 82e:41007
 Hermann, Thomas (with Vértési, P.) On an interpolatory operator and its saturation. 82j:41003
 Hur'a, Anton On exponential interpolation. (Slovak and Russian summaries) 82e:41005
 Isac, V. K. Pontrjagin's maximum principle and Π -splines. (Russian) 82e:41008
 Jakimovski, Amnon (with Russell, D. C.) Interpolation by functions with m th derivative in pre-assigned spaces. 82j:41004
 Jeromin, Bernd Über glättende Spline-Funktionen. [On smoothing spline functions] 82k:41002
 Jiang, Yuan Lin The convergence of some interpolation polynomials. (Chinese. English summary) 82f:41006
 Karenin, L. Ja. Interpolation on the unit circle. (Russian) 82e:41006
 Kutepov, V. A. Remarks on the question of interpolation on unbounded sets. (Russian) 82j:41005
 Litvin, O. M. Generalized nonlinear interpolation. (Russian. English summary) 82a:41004
 Lorentz, G. G. Symmetry in Birkhoff matrices. 82j:41006
 Lorentz, Rudolph A. Interpolation and probability. 82f:41007
 Maetz, J. I. See Gasca González, Mariano, 82a:41003
 Mangerson, Dumitru Ion See Nielson, Gregory M., 82m:41002
 Mansfield, Lois Interpolation to scattered data in the plane by locally defined C^1 functions. 82e:41007
 Mathur, K. K. Certain interpolation processes. 82i:41002
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 Some techniques in approximation theory. 82d:41003
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 Misra, N. On the convergence of Hermite-Fejér and Hermite-Fejér type processes. 82j:41004
 Mühlbach, G. An algorithmic approach to finite linear interpolation. 82e:41009
 Musaei, B. I. Approximation of periodic functions of two variables by Fourier sums and interpolation polynomials. (Russian) 82e:41010
 Nevai, Paul G. Mean convergence of Lagrange interpolation. II. 82i:41003
 Nielson, Gregory M. (with Mangerson, Dumitru Ion) Bilinear interpolation in triangles based upon a Mangerson theorem. (Spanish summary) 82m:41002
 Papanichail, N. (with Worsey, A. J.) A class of C^2 piecewise quintic polynomials. 82a:41006
 Filipčuk, S. S. Divergence of Lagrange interpolation processes on countable sets. (Russian) 82d:41004
 Popoviciu, Elena Sur les fonctions simultanément convexes par rapport aux plusieurs ensembles interpolatoires. (See 82e:90005)
 Sur un théorème de la moyenne. 82f:41008
 Posdorf, H. See Baszenski, G.; et al., 82b:41003; Delves, F.-J., 82e:41002 and 82j:41002
 Prasad, Jagdish (with Varma, A. K.) A study of some interpolatory processes based on the roots of Legendre polynomials. 82k:41005
 See also Varma, A. K., 82g:41005

- Raymon, L. Piecewise monotone interpolation in polynomial time. **82d:41005**
- Rubel, Lee A. See Briggs, John. **82e:41005**
- Russell, D. C. See Jakimovski, Amnon. **82j:41004**
- Salzer, Herbert E. Note on trigonometric divided differences. **82c:41008**
- Rational interpolation using incomplete barycentric forms. (German and Russian summaries) **82b:41004**
- Sendov, Blagovest. See Mills, T. M. **82b:41003**
- Ševaldin, V. T. A problem of extremal interpolation. (Russian) **82g:41004**
- Shisha, Oved. See Byrnes, J. S. **82d:41002**
- Strygin, V. V. (with Strygina, S. O.) ★Алгебраическое интерполирование. (Russian) [Algebraic interpolation] **82f:41009**
- Strygina, S. O. See Strygin, V. V. **82f:41009**
- Tihomirov, N. B. Divergence of interpolation processes. (Russian) **82d:41006**
- Divergence of interpolation processes on a set of complete measure. (Russian) **82e:41005**
- Varna, A. K. (with Prasad, Jagdish) An interpolatory rational approximation. **82g:41005**
- See also Prasad, Jagdish. **82b:41005**
- Vértesi, P. Lagrange interpolation for continuous functions of bounded variation. **82a:41007**
- On Lagrange interpolation. **82e:41011**
- See also Erdős, Paul. **82e:41006** and Hermann, Thomas. **82j:41003**
- Worsey, A. J. See Papamichael, N. **82a:41006**
- Bibliography:**
- Hermite-Fejér interpolation. See Mills, T. M. **82d:41003**
- secondary classifications:
- Baszenski, G. (with Delvos, F.-J.; Posdorf, H.) ★Darstellungsformeln zur zweidimensionalen reduzierten Hermite-Interpolation. (German) [Representation formulas for two-dimensional reduced Hermite interpolation] **(82d:41043)**
- Behforooz, G. H. (with Papamichael, N.) End conditions for interpolatory quintic splines. **(82j:41012)**
- Brezinski, Claude. The Mühlbach-Neville-Aitken algorithm and some extensions. **(82c:65009)**
- Cavaretta, A. S., Jr. (with Sharma, Ambikeshwar; Varga, R. S.) Interpolation in the roots of unity: an extension of a theorem of J. L. Walsh. **(82j:30049)**
- Chan, L. Y. (with Chen, Yung-Ming; Liu, Ming Chit) Some properties of asymptotic functions. **(82g:26005)**
- Chen, Yung-Ming. See Chan, L. Y.; et al. **(82g:26005)**
- Čuprigin, S. A. Lacunary trigonometric interpolation of the type $(0, 1, \dots, p, q, r)$. (Russian) **(82h:42008)**
- Delvos, F.-J. See Baszenski, G.; et al. **(82d:41043)**
- Ditzian, Z. Interpolation theorems and the rate of convergence of Bernstein polynomials. **(82d:41019)**
- Dzjadik, S. Ju. See Dzjadik, V. K.; et al. **(82k:42003)**
- Dzjadik, V. K. (with Dzjadik, S. Ju.; Pripik, O. S.) On the asymptotic behavior of the Lebesgue constant in trigonometric interpolation. (Russian) **(82k:42003)**
- Eisenberg, Sheldon M. Recent developments in approximation by Hermite-Fejér operators. **(82e:41002)**
- Elliott, David. Lagrange interpolation—decline and fall? **(82c:01060)**
- Erdős, Paul. Problems and results on polynomials and interpolation. **(82g:30013)**
- Gervais, Robert (with Rahman, Q. I.; Schmeisser, G.) Approximation by $(0, 2)$ -interpolating entire functions of exponential type. **(82j:30050)**
- Gorenflo, Rudolf (with Hilpert, Martin) On the continuity of convexly constrained interpolation. **(82c:41032)**
- Hilpert, Martin. See Gorenflo, Rudolf. **(82c:41032)**
- Kozłowski, Andrzej. Analytic structure of the function of special interpolation. I. (Polish summary) **(82m:30038a)**
- Analytic structure of the function of special interpolation. II. (Polish summary) **(82m:30038b)**
- Analytic structure of the function of special interpolation. III. (Polish summary) **(82m:30038c)**
- Leonov, A. I. See Soliev, Ju. **(82f:41041)**
- Liu, Ming Chit. See Chan, L. Y.; et al. **(82g:26005)**
- MacLean, H. Alan. Transforms of measures on quotients and spline functions. **(82c:43004)**
- Micchelli, Charles A. (with Milman, Pierre) A formula for Kergin interpolation in \mathbb{R}^d . **(82h:41008)**
- Milman, Pierre. See Micchelli, Charles A. **(82h:41008)**
- Nielson, Gregory M. Blending methods of minimum norm for triangular domains. **(82c:65005)**
- Nudelman, A. A. A generalization of classical interpolation problems. (Russian) **(82f:30033)**
- Ormsby, J. F. A. Generalized interpolation, sampling expressions, and their relationship. **(82k:94006)**
- Papamichael, N. See Behforooz, G. H. **(82j:41012)**
- Popov, B. A. Uniform approximation with interpolation. (Russian) **(82i:41010)**
- Posdorf, H. See Baszenski, G.; et al. **(82d:41043)**
- Povčun, L. P. Fourier-Laguerre series and Lagrange interpolation polynomials. (Russian) **(82e:42021)**
- Pripik, O. S. See Dzjadik, V. K.; et al. **(82k:42003)**
- Rahman, Q. I. Some questions of uniqueness concerning interpolation by entire functions of exponential type. **(82g:30069)**
- See also Gervais, Robert; et al. **(82j:30050)**
- Rumjancev, I. A. ★Локальные методы интерполяции. (Russian) [Local methods of interpolation] **(82f:41002)**
- Schmeisser, G. See Gervais, Robert; et al. **(82j:30050)**
- Sharma, Ambikeshwar. See Cavaretta, A. S., Jr.; et al. **(82j:30049)**
- Soliev, Ju. (with Leonov, A. I.) Approximation of functions of two variables in n -spaces. (Russian. Tajiki summary) **(82f:41041)**
- Varga, R. S. See Cavaretta, A. S., Jr.; et al. **(82j:30049)**
- Wolfe, Jerry M. Interpolation and best L_p local approximation. **(82k:41017)**
- 41A10 Approximation by polynomials** {For approximation by trigonometric polynomials, see 42A10.}
- Andó, Györgyi (with Lipsczy, Zsolt) Polynomial approximations in space L_∞ . (Hungarian. English summary) **82k:41003**
- Arioka, Shigekatsu. See Ogawa, Shiro; et al. **82m:41006**
- Becker, Michael (with Nessel, Rolf J.) On the global approximation by Kantorovich polynomials. **82f:41010**
- (with Nessel, Rolf J.) Some global direct estimates for Kantorovich polynomials. **82k:41004**
- Berens, Hubert (with DeVore, Ronald A.) A characterization of Bernstein polynomials. **82b:41004**
- Canuto, Claudio (with Quarteroni, A.) Approximation results for orthogonal polynomials in Sobolev spaces. **82m:41003**
- Chui, Charles K. Problems and results on best inverse approximation. **82i:41006**
- Derriennic, Marie Madeleine. Sur l'approximation de fonctions intégrables sur $[0, 1]$ par des polynômes de Bernstein modifiés. (English summary) **82m:41004**
- DeVore, Ronald A. See Berens, Hubert. **82b:41004**
- Doronin, V. G. (with Ligan, A. A.) Best one-sided approximation on an interval. (Russian) **82b:41005**
- Ermakov, A. I. Best Hausdorff approximations by algebraic polynomials, and the continuity of a function. (Russian) **82d:41007**
- Filippovskii, V. G. Approximation of functions that are conjugate to functions of the class W'' by means of Rogvinski polynomials. (Russian. English summary) **82m:41005**
- Filozof, L. I. See Mahomed, M. S. **82j:41009**
- Groß, J. Verallgemeinerung eines Satzes über gleichmäßige Approximation in einem unendlichen Intervall. **82j:41006**
- Habib, Anwar. On the degree of approximation of functions by certain new Bernstein type polynomials. **82i:41007**
- Hasson, Maurice. Derivatives of the algebraic polynomials of best approximation. **82f:41011**
- Comparison between the degrees of approximation by lacunary and ordinary algebraic polynomials. **82f:41012**
- Haverkamp, Richard. Approximationsfehler der Ableitungen von Interpolationspolynomen. (English summary) **82f:41013**
- Henry, Myron S. (with Swetts, John J.; Weinstein, Stanley E.) Lebesgue and strong unicity constants. **82g:41007**
- (with Schmidt, Darrell) Error bounds for polynomial product approximation. **82i:41008**
- Ivanov, Kamen G. One-sided algebraic approximation on the real axis with the weight $\exp(-x^2)$. **82j:41007**
- Jerri, A. J. The application of general discrete transforms to computing orthogonal series and solving boundary value problems. **82a:41008**
- Kairies, H.-H. Mean values and function spaces. **82d:41008**
- Kasimov, B. Polynomial approximations of functions of Zygmund's class in the Hausdorff metric. (Russian) **82h:41006**
- Kergin, Paul. A natural interpolation of C^K functions. **82b:41007**
- Kida, Sōsaburō. See Ogawa, Shiro; et al. **82m:41006**
- Kioustelidis, J. B. Optimal segmented polynomial L_p -approximations. (German summary) **82i:41006**
- Kuprin, V. A. Application of Faber series to an approximate solution of a problem of linear conjugation. (Russian) **82e:41012**
- Kurgaev, A. F. See Pisarskii, A. V. **82k:41006**
- Ligan, A. A. See Doronin, V. G. **82b:41005**
- Lipsczy, Zsolt. See Andó, Györgyi. **82k:41003**
- Lorentz, G. G. Problems for incomplete polynomials. **82j:41008**
- Mahomed, M. S. (with Filozof, L. I.) Domain of convergence of approximation polynomials. (Russian) **82j:41009**
- Mamedhanov, Dž. I. Problems of the theory of best polynomial approximation with fixed weight. (Russian. Azerbaijani and English summaries) **82e:41009**
- Marlewski, Adam. Asymptotic form of Bernstein-Kantorovich approximation. **82h:41007**
- Mastroserio, C. Inequalities concerning polynomial approximation in the uniform norm. (Italian. English summary) **82k:41005**
- Micchelli, Charles A. (with Milman, Pierre) A formula for Kergin interpolation in \mathbb{R}^d . **82h:41008**
- Milman, Pierre. See Micchelli, Charles A. **82h:41008**
- Nagel, Josef. Asymptotic properties of powers of Bernstein operators. **82f:41014**
- Nessel, Rolf J. See Becker, Michael. **82f:41010** and **82k:41004**
- Ogawa, Shiro (with Kida, Sōsaburō; Arioka, Shigekatsu) On a Jackson's type theorem in two dimension. **82m:41006**
- Oskolkov, K. I. The upper bound of the norms of orthogonal projections onto subspaces of polynomials. **82e:41013**
- Pisarskii, A. V. (with Kurgaev, A. F.) Telescopic approximation of functions. **82k:41006**
- Popov, B. A. Uniform approximation with interpolation. (Russian) **82i:41010**
- Quarteroni, A. See Canuto, Claudio. **82m:41003**
- Rokne, J. Polynomial least square interval approximation. (German summary) **82m:41007**
- Saff, E. B. (with Ullman, Joseph L.; Varga, R. S.) Incomplete polynomials: an electrostatics approach. **82h:41009**
- Schmidt, Darrell. See Henry, Myron S. **82i:41008**
- Schurer, F. (with Steutel, F. W.) Exact degrees of approximation for two-dimensional Bernstein operators on C^1 . **82h:41010**
- Sinwel, Herbert F. Uniform approximation of differentiable functions by algebraic polynomials. **82i:41011**
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- Stoutel, F. W. See Schurer, F., 82h:41010
- Svedlov, A. S. Orders of coapproximations of functions by algebraic polynomials. (Russian) 82c:41009
- Sweetis, John J. See Henry, Myron S.; et al., 82g:41007
- Takahashi, Sin Ei An extension of Müntz-Szász theorem and Hwang-Pan-Wu theorem. 82m:41008
- Temeljakov, V. N. Approximation of functions from the Lipschitz class by algebraic polynomials. (Russian) 82d:41011
- Ullman, Joseph L. See Saff, E. B.; et al., 82h:41009
- Varga, R. S. See Saff, E. B.; et al., 82h:41009
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- Andrievskii, V. V. (with German, S. P.) Approximation on quasiconformal arcs. (Russian. English summary) 82c:30022
- Bacopoulos, Alexis (with Shisha, Oved) Absolute and relative approximation with a singularity. 82d:41021
- Berman, D. L. An everywhere divergent extended Krylov-Štaerman interpolation process. (Russian) 82m:41001
- Bertuzzi, Alessandro (with Gandolfi, Alberto; Germani, Alfredo) A Weierstrass-like theorem for real separable Hilbert spaces. 82k:46071
- Bilić, V. I. See Tamrazov, P. M., 82k:30047
- Borosh, I. (with Chui, Charles K.) A problem of Lorentz on approximation by incomplete polynomials. 82c:41037
- Brackx, F. See Delanghe, R., 82c:32025
- Brutman, L. On the polynomial and rational projections in the complex plane. 82b:30043
- (with Pinkus, A.) On the Erdős conjecture concerning minimal norm interpolation on the unit circle. 82b:30044
- Cemuş, Gheorghe (with Săciu, Ion) On some stochastic approximations for random functions. (French summary) 82b:60058
- A Weierstrass-type theorem for vector random functions. 82c:60097
- Chui, Charles K. See Borosh, I., 82c:41037
- Delanghe, R. (with Brackx, F.) Runge's theorem in hypercomplex function theory. 82c:32025
- Dyn'kin, E. M. Constructive characterization of S. L. Sobolev and O. V. Besov classes. (Russian) 82k:46051
- Eichner, L. Existence of best nonlinear L_p -approximations. 82c:41054
- Eisenberg, Sheldon M. Recent developments in approximation by Hermite-Fejér operators. 82c:41002
- Eneadanya, S. A. N. On the derivative of interpolation polynomials. 82a:41001
- Erdős, Paul (with Vértési, P.) On the almost everywhere divergence of Lagrange interpolatory polynomials for arbitrary system of nodes. 82c:41006a
- (with Vértési, P.) Correction of some misprints in our paper: "On almost everywhere divergence of Lagrange interpolatory polynomials for arbitrary system of nodes". 82c:41006b
- Ferguson, Le Baron O. Approximation by polynomials with integral coefficients in several complex variables. 82b:32021
- Gandolfi, Alberto See Bertuzzi, Alessandro; et al., 82k:46071
- Ganzburg, M. I. Multidimensional Jackson theorems. (Russian) 82m:41012
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- Germani, Alfredo See Bertuzzi, Alessandro; et al., 82k:46071
- Goodenough, S. J. (with Mills, T. M.) A new estimate for the approximation of functions by Hermite-Fejér interpolation polynomials. 82c:41002
- Hasson, Maurice Functions f for which $E_n(f)$ is exactly of the order $\frac{1}{n}$. 82d:41020
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- Ivanov, Kamen G. Direct and converse theorems for the best algebraic approximation in $C[-1,1]$ and $L_p[-1,1]$. 82b:41024
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- Klunnik, O. O. See Makarov, V. L.; et al., 82d:30031
- Kopistira, M. P. See Makarov, V. L.; et al., 82d:30031
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- ### 41A15 Spline approximation
- Barrar, R. B. (with Loeb, Henry; Werner, Helmut) Erratum: "On the uniqueness of the best uniform extended totally positive monospline" [J. Approx. Theory 28 (1980), no. 1, 20-29; MR 81a:41018]. 82g:41008
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- Beaton, Rick Convex approximation by splines. 82h:41012
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- Micchelli, Charles A. (with Sharma, Ambikeshwar) Spline functions on the circle: cardinal L -splines revisited. 82b:41011
- See also Dahmen, Wolfgang A., 82j:41013
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- Cubic splines with given values of the second derivatives at the knots. 82f:41016
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- Scherer, Karl (with Schumaker, Larry L.) A dual basis for L -splines and applications. **82i:41015**
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- Schumaker, Larry L. See Scherer, Karl, **82i:41015**
- Sharma, Ambikeshwar See Micchelli, Charles A., **82b:41011** and Mohapatra, Ram Narayan, **82i:41013**
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- Totkov, G. A. Converse theorems for one-sided spline approximation. **82i:41017**
- Trimbalarjo, J. Cardinal discrete splines. **82b:41012**
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- Wen, Tao A keep-convex interpolation for monotonic smooth functions. (Chinese. English summary) **82f:41020**
- Weng, Zu Yin Optimal error bounds for derivatives of cubic interpolating splines with equidistant nodes. (Chinese. English summary) **82a:41014**
- Werner, Helmut Neuere Entwicklungen auf dem Gebiete der nichtlinearen Splinefunktionen. **82f:41021**
- The development of nonlinear splines and their applications. **82e:41019**
- See also Barrar, R. B.; et al., **82g:41008**
- Xiong, Zhen Xiang Splines of $(2n+1)$ th degree with coefficients expressed by even-order derivatives. (Chinese. English summary) **82b:41013**
- Zenskybaev, A. A. Spline-interpolation and the best approximation by trigonometric polynomials. (Russian) **82b:41014**
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- Andreev, Andrei St. (with Popov, V. A.; Sendov, Blagovest) Jackson-type theorems for the best one-sided approximations by trigonometric polynomials and splines. (Russian) **82d:42001**
- de Boor, Carl Convergence of abstract splines. **82h:41042**
- Brudnyi, Ju. A. Rational approximation and exotic Lipschitz spaces. **82f:41022**
- Chatterjee, A. (with Dikshit, H. P.) Complex cubic spline interpolation. **82g:65010**
- Ciesielski, Z. Properties of realizations of random fields. **82g:60064**
- Dahmen, Wolfgang A. Multivariate B -splines—recurrence relations and linear combinations of truncated powers. **82c:65008**
- Approximation by smooth multivariate splines on nonuniform grids. **82d:65014**
- (with Micchelli, Charles A.) Computation of inner products of multivariate B -splines. **82h:65006**
- Davidčik, A. N. (with Ligon, A. A.) Exact constants in Jackson type inequalities. (Russian) **82j:41015**
- Dierckx, P. Algorithm/Algorithmus 42. An algorithm for cubic spline fitting with convexity constraints. (German summary) **82h:65007**
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- Fu, Yen Tru Interpolation by generalized polynomials. **82a:41002**
- Gasser, Th. See Krumm, B., **82i:62003**
- Gutknecht, Martin H. Two applications of periodic splines. **82d:65015**
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- Haidarov, A. A. (with Habirov, N. A.) On a problem of processing gamma-spectra by splines. (Russian) **82f:81073**
- Hartley, Peter On using curved knot lines. **82b:65006**
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- Huang, Zhi Yuan See Xiong, Yi Qi; et al., **82f:65014**
- Imamov, A. Solution of nonlinear equations by the method of inverse spline-interpolation. (Russian) **82j:65027**
- Isaev, V. K. Pontrjagin's maximum principle and II-splines. (Russian) **82e:41008**
- Jen, Erica (with Srivastav, R. P.) Cubic splines and approximate solution of singular integral equations. **82a:45021**
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- Jeromin, Bernd Über glättende Spline-Funktionen. [On smoothing spline functions] **82k:41002**
- Kačnova, T. I. On the question of approximation of stochastic processes by systems of splines. (Russian) **82h:60005**
- Kalik, Carol Génération d'éléments spline à l'aide des applications monotones. (Romanian summary) **82m:41033**
- Kime, Ha Jine Numerical construction of cubic-quartic (second-order) spline fits. **82d:65016**
- Kobkov, V. V. Convergence of cubic splines with supplementary nodes. (Russian) **82d:65017**
- Krumm, B. (with Gasser, Th.) Robustes Glätten. (See **82i:62003**)
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- Papamichael, N. See Hough, D. M., **82c:30012**
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- Xie, Shen Quan Quadratic and cubic spline interpolation and their variational properties. (Chinese) **82j:65005**
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- Zanlav, T. Some estimates of the approximation of second derivatives by means of cubic interpolation splines. (Russian) **82j:65011**

41A17 Inequalities in approximation (Bernšteĭn, Jackson, Nikol'skii type inequalities)

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- Butzer, P. L. The Banach-Steinhaus theorem with rates, and applications to various branches of analysis. **82g:41013**
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- Holland, A. S. B. (with Phillips, G. M.; Taylor, P. J.) Generalization of a theorem of Bernšteĭn. **82a:41015**
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- Pekarskii, A. A. Estimates of higher derivatives of rational functions and their applications. (Russian. English summary) **82a:41016**
- Phillips, G. M. See Holland, A. S. B.; et al., **82a:41015**
- Pokalo, A. K. An asymptotic formula for deviation of double multiplicative operators in a Banach space with a Cesàro approximative unit. The Bernšteĭn inequality and Jackson's theorem. (Russian. English summary) **82j:41016**
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- Sazonov, A. A. Upper bounds of deviations of interpolation splines on some classes of functions. (Russian) **82b:41016**
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- Temljakov, V. N. Correlations between best approximations of functions of two variables. (Russian) **82e:41020**

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- Galmazarov, G. Moduli of smoothness of fractional order of functions defined on the whole real axis. (Russian. Tajiki summary) (82j:42011)
- Goetgheluck, Pierre. Inégalité de Markov dans les ensembles effilés. (82j:26019)
- Höllig, Klaus. A generalization of Jackson's inequality. (82h:41015)
- Ivanov, V. I. Direct and inverse theorems of approximation theory in the L_p metric for $0 < p < 1$. (Russian) (82d:42002)
- Maestroserio, C. Inequalities concerning polynomial approximation in the uniform norm. (Italian. English summary) (82h:41005)
- Moldovan, Gr. L'évaluation de l'erreur de l'approximation d'une fonction continue par certains opérateurs linéaires positifs. (82h:41026)
- Nersisjan, A. A. Inequalities of S. N. Merzljakov and V. K. Dzjadik type in a metric of $L(T)$. (Russian. Azerbaijani and English summaries) (82m:30003)
- Podkorytov, A. N. (with Dyn'kin, E. M.) Inequality in L^p of V. A. Markov type. (Russian) (82d:26010)
- Szabados, József (with Varma, A. K.) Inequalities for derivatives of polynomials having real zeros. (82h:26017)
- Tereshin, A. P. Estimation of mixed p -norm by p -norms of smaller multiplicity. (Russian) (82i:46045)
- Varma, A. K. Derivatives of polynomials with positive coefficients. (82j:26014)
- See also Szabados, József, (82h:26017)

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- Bennett, Colin (with Rudnick, Karl; Vaaler, Jeffrey D.) Best uniform approximation by linear fractional transformations. 82h:41017
- Brudnyi, Ju. A. Rational approximation and exotic Lipschitz spaces. 82h:41022
- Fraser, W. (with Wolfe, Jerry M.) Conditions for a rational approximation to be locally best in the l_1 sense. 82m:41013
- Kaufman, Edwin H., Jr. (with Taylor, Gerald D.) Restricted-denominator rational approximation. 82d:41016
- Newman, Donald J. Approximation to x^n by lower degree rational functions. 82e:41014
- Petrusev, Penčo P. Lower bounds for best rational approximations in the Hausdorff metric. (Russian) 82g:41015
- Rational approximations of functions with bounded variation in the Hausdorff and integral metric. (Russian) 82i:41019
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- Seevinck, E. Simple, wide-range approximations to trigonometric and inverse trigonometric functions useful in real-time signal processing. 82d:41017
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- Vaaler, Jeffrey D. See Bennett, Colin; et al., 82h:41017
- Wolfe, Jerry M. See Fraser, W., 82m:41013

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- Andersson, Jan-Erik. Approximation of e^{-x} by rational functions with concentrated negative poles. (82m:41014)
- Andrievskii, V. V. (with Israfilov, D. M.) Approximation of functions on quasiconformal curves by rational functions. (Russian. Azerbaijani and English summaries) (82m:30039)
- Dunham, Charles B. Stability of differential correction for rational Chebyshev approximation. (82e:65015)
- Israfilov, D. M. (with Mamedhanov, Dž. I.) Some problems of rational and polynomial approximation on arcs in space C metrics. (Russian. Azerbaijani and English summaries) (82h:30045)
- See also Andrievskii, V. V., (82m:30039)
- Kanatnikov, A. N. Limiting sets along sequences of compacta. (Russian) (82g:30056)
- Korevaar, J. Polynomial and rational approximation in the complex domain. (82j:30053)
- Lou, Yuan Ren. See Shen, Xie Chang, (82j:30054)
- Lutterodt, Clement H. On a theorem of Montessus de Ballore for (ν, μ) -type rational approximants in C . (82i:32043)
- Mamedhanov, Dž. I. (with Nersisjan, A. A.) Approximation in the metric of the space L_1 . (Russian) (82a:41033)
- See also Israfilov, D. M., (82h:30045)
- Nersisjan, A. A. See Mamedhanov, Dž. I., (82a:41033)
- Newman, Donald J. Polynomials and rational functions. (82h:30006)
- Prasad, Jagdish. See Varma, A. K., (82g:41005)
- Rao, N. V. See Ahern, Patrick, (82h:30041)
- Reich, Edgar. L_1 -approximation of meromorphic functions. (82f:30038)
- Sabozov, O. Š. Approximation of upper semicontinuous functions by rational-fractional operators of L. V. Kantorovič type. (Russian. Tajiki summary) (82i:41024)
- Salzer, Herbert E. Rational interpolation using incomplete barycentric forms. (German and Russian summaries) (82i:41004)
- Shen, Xie Chang (with Lou, Yuan Ren) The best approximation by rational functions in a domain of the complex plane. (Chinese) (82j:30054)
- Shi, Ying Guang. Simultaneous best rational approximation. (Chinese. English summary) (82e:41029)
- Stefanescu, I. Sabba. On the stable analytic continuation with rational functions. (82j:30055)
- Varma, A. K. (with Prasad, Jagdish) An interpolatory rational approximation. (82g:41005)

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41A21 Padé approximation

- Brezinski, Claude. ★Padé-type approximation and general orthogonal polynomials. 82e:41017
- Bultheel, A. Recursive algorithms for nonnormal Padé tables. 82e:41024
- Gilewicz, Jacek. ★Approximants de Padé. (French) [Padé approximants] 82e:41015
- Kalugin, V. A. A note on the structure of Padé's table. (Russian. English summary) 82h:41018
- López Lagomasino, Guillermo. See Vavilov, V. V.; et al., 82e:41026
- McCabe, John H. Continued fractions associated with two-point Padé approximations. 82e:41025
- Nedelčev, Hristo. See Semerdžiev, Hristo, 82h:41021
- Pindor, M. Variational calculation of matrix elements of operator Padé approximants. 82h:41009
- Prohorov, V. A. See Vavilov, V. V.; et al., 82e:41026
- van Rossum, H. Generalized Padé approximants. 82d:41018
- Semerdžiev, Hristo (with Nedelčev, Hristo) Diagonal Padé approximants for a discontinuous function given by its Fourier series. (Bulgarian. Russian and English summaries) 82h:41021
- Vavilov, V. V. (with López Lagomasino, Guillermo; Prohorov, V. A.) An inverse problem for the rows of a Padé table. (Russian) 82e:41026

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- Baker, George A., Jr. (with Kincaid, John M.) The continuous-spin Ising model, g_0, φ^4 , field theory, and the renormalization group. (82c:82090)
- Brezinski, Claude. The Mühlbach-Neville-Aitken algorithm and some extensions. (82c:65009)
- (Browder, Felix E.) See Jones, William B.; et al., (82c:30001)
- de Bruin, M. G. (with Saff, E. B.; Varga, R. S.) On the zeros of generalized Bessel polynomials. I, II. (82d:33015)
- Bultheel, A. (with Wuytack, L.) Stability of numerical methods for computing Padé approximants. (82e:65018)
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- Chisholm, J. S. R. Multivariate approximants with branch cuts. (82e:65019)
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- Jones, William B. (with Thron, Wolfgang J.) ★Continued fractions. (82c:30001)
- Kincaid, John M. See Baker, George A., Jr., (82c:82090)
- Lubinsky, D. S. On nondiagonal Padé approximants. (82c:30051)
- Lake, Yudel L. Solution of second order difference equations via the r -method. (82c:65075)
- Lungu, K. N. On the properties of functions connected with the behavior of poles of Padé approximants. (Russian) (82h:30038)
- Nikšić, E. M. Simultaneous Padé approximants. (Russian) (82c:30053)
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- Rahmanov, E. A. Convergence of Padé approximations in classes of holomorphic functions. (Russian) (82f:30037)
- Saff, E. B. See de Bruin, M. G.; et al., (82d:33015)
- Suetin, S. P. The Montessus de Ballore theorem for rational approximations of orthogonal expansions. (Russian) (82g:42020)
- Thron, Wolfgang J. See Jones, William B., (82c:30001)
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41A25 Rate of convergence, degree of approximation

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- Boyd, John Philip. The rate of convergence of Chebyshev polynomials for functions which have asymptotic power series about one endpoint. 82h:41022
- Brass, Helmut. Zur Approximation einer Klasse holomorpher Funktionen im Reellen. 82c:41017
- Ditzian, Z. Interpolation theorems and the rate of convergence of Bernstein polynomials. 82d:41019
- Doroin, V. G. (with Ligon, A. A.) Best one-sided approximation of some classes of functions. (Russian) 82f:41023
- Dunham, Charles B. (with Williams, Jack) Rate of convergence of discretization in Chebyshev approximation. 82f:41024
- Fesčev, I. H. See Gahov, F. D., 82j:41018
- Gahov, F. D. (with Fesčev, I. H.) Best approximations and differential properties of two conjugate periodic functions with two variables. (Russian. English summary) 82j:41018
- Golubov, B. I. Rate of convergence of integrals of Gauss-Weierstrass type for functions of several variables. (Russian) 82f:41025
- Görlich, E. (with Wallerath, P.) The fundamental theorem of best approximation for logarithmic and exponential orders. 82h:41023
- Gröf, J. Negative Beantwortung einer Approximationsfrage. 82h:41019
- Guliev, B. B. Order of approximation of functions on the sphere that allow application of the Laplace operator by means of D. Jackson's integral. (Russian) 82e:41027
- Hasson, Maurice. Functions f for which $E_n(f)$ is exactly of the order $\frac{1}{n}$. 82d:41020
- Iiev, G. L. Analogues of Jackson theorem for the partially monotone approximation. 82k:41010

- Ivanov, Kamen G. Direct and converse theorems for the best algebraic approximation in $C[-1,1]$ and $L_p[-1,1]$. **82h:41024**
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 Williams, Jack. See Dunham, Charles B., **82f:41024**

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 Derriennic, Marie Madeleine Sur l'approximation de fonctions intégrables sur $[0, 1]$ par des polynômes de Bernstein modifiés. (English summary) (**82m:41004**)
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 Mastroianni, Giuseppe (with Occorsio, Mario Rosario) On the derivatives of Stancu polynomials. (Italian. English summary) (**82a:41019**)
 Merlina, N. I. On the question of approximating continuous functions by singular integrals. (Russian) (**82d:41025**)
 Mills, T. M. Some techniques in approximation theory. (**82d:41003**)
 Mohapatra, Ram Narayan (with Sharma, Ambikeshwar) Convergence of discrete spline interpolants without mesh ratio restrictions. (**82i:41013**)
 Mond, B. (with Vasudevan, R.) On approximation by linear positive operators. (**82k:41014**)
 Nersisjan, A. A. See Mamedhanov, D6. I., (**82a:41033**)
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 Newman, Donald J. Approximation to x^n by lower degree rational functions. (**82c:41014**)
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 Rautela, S. S. On the degree of approximation to the generating function by its ultraspherical expansion on a sphere. (Hindi. English summary) (**82c:33015**)
 Scherer, Karl (with Schumaker, Larry L.) A dual basis for L -splines and applications. (**82i:41015**)
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 Singh, O. P. See Rathore, R. K. S., (**82h:41030**)
 Taberski, Roman Approximation by entire functions of exponential type. (**82f:41027**)
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 Wasilkowski, G. W. n -evaluation conjecture for multipoint iterations for the solution of scalar nonlinear equations. (**82c:65030**)

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41A27 Inverse theorems

- Hasson, Maurice (with Shisha, Oved) Approximation by lacunary polynomials: a converse theorem. **82j:41019**
 Shisha, Oved See Hasson, Maurice, **82j:41019**

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- Pekarskii, A. A. Estimates of higher derivatives of rational functions and their applications. (Russian. English summary) (**82a:41016**)
 Totkov, G. A. Converse theorems for one-sided spline approximation. (**82i:41017**)

41A28 Simultaneous approximation

- Amir, D. (with Ziegler, Zvi) Characterizations of relative Chebyshev centers. **82c:41018**

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- Bacopoulos, Alexis (with Shisha, Oved) Absolute and relative approximation with a singularity. **82h:41021**
 Beatson, Rick Joint approximation of a function and its derivatives. **82c:41019**
 Hudalberdier, S. A simultaneous weighted approximation of a function and its derivatives on the exterior of a segment and half-axis. (Russian) **82h:41020**
 Parusnikov, V. I. The Jacobi-Perron algorithm and simultaneous approximation of functions. (Russian) **82h:41027**
 Sahney, B. N. (with Singh, Sankatha P.) On best simultaneous approximation. **82h:41021**
 Shi, Ying Guang Best simultaneous L_p approximation. (Chinese. English summary) **82c:41028**
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 Ziegler, Zvi See Amir, D., **82c:41018** and **82h:41026**

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- Bacopoulos, Alexis See Grimard, Irene, (**82g:65013**)
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 Zaderer, N. N. Simultaneous approximation of periodic functions and their derivatives by de la Vall6e-Poussin sums. (Russian) (**82m:42005**)

41A29 Approximation with constraints

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- Andersson, Jan-Erik Approximation of e^{-x} by rational functions with concentrated negative poles. **82m:41014**
 Babenko, V. F. (with P6tugov, S. A.) Approximation in the mean of linear combinations of shifts of certain functions. (Russian) **82f:41026**
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- Boghossian, Artin Tangential approximation of continuous functions on open sets. **(82j:31001)**
- Buck, R. Creighton Dispersion mapping theorems. **(82i:54027)**
- Daugave, V. A. Approximation of a function of two variables by the sum of the products of functions of one variable. (Russian) **(82h:41026)**
- Eichner, L. Existence of best nonlinear L_p -approximations. **(82e:41054)**
- von Golitschek, Manfred Approximating bivariate functions and matrices by nomographic functions. **(82f:65144)**
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- Kiontsehdis, J. B. Optimal segmented approximations. (German summary) **(82i:41032)**
- Moiseev, A. A. A class of functions with a given modulus of continuity. (Russian. English summary) **(82f:26003)**
- Nessel, Rolf J. See Becker, Michael, **(82f:41010)**
- Nishishiraho, Toshihiko Quantitative theorems on linear approximation processes of convolution operators in Banach spaces. **(82m:41034)**
- Richter-Dyn, Nira A straightforward generalization of Diliberto and Straus' algorithm does not work. **(82j:41032)**
- Rubel, Lee A. A universal differential equation. **(82e:34015)**
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- Sazonova, L. V. A remark on a problem on the approximation of a function of two variables. (Russian) **(82m:41029)**
- Smereka, I. P. Stationary oscillation processes in essentially nonlinear autonomous systems excited by instantaneous forces. (Russian) **(82g:34047)**
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- Švareman, P. A. An extension theorem for a class of spaces defined by local approximations. (Russian) **(82d:46057)**
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- Zalik, R. A. The fundamentality of sequences of translates. **(82d:42009)**

41A35 Approximation by operators (in particular, by integral operators)

- Altomare, Francesco Approximation theorems of Korovkin type in function spaces. (Italian. English summary) **82h:41029**
- Babenko, V. F. (with Pičugov, S. A.) Best linear approximation of certain classes of differentiable periodic functions. (Russian) **82h:41022**
- Buslaev, A. P. Approximation of the differentiation operator on the circle. (Russian. English summary) **82e:41032**
- Chalmers, Bruce L. A natural simple projection with norm $\leq \sqrt{n}$. **82m:41019**
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- Hahn, L. Approximation by operators of probabilistic type. **82m:41020**
- Labsker, L. G. On the question of criteria for Korovkin (S_0^m, Φ_0^k) -sets. (Russian) **82f:41028**
- Merlina, N. I. On the question of approximating continuous functions by singular integrals. (Russian) **82d:41025**
- Pičugov, S. A. See Babenko, V. F., **82h:41022**
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- Boman, Jan Equivalence of generalized moduli of continuity. **(82m:42012)**
- Buslaev, A. P. Approximation of an operator of differentiation. (Russian) **(82k:41027)**
- Chalmers, Bruce L. Formulas for minimal projections. **(82i:46043)**
- Fisher, S. D. (with Morris, Peter D.; Wulbert, D. E.) Unique minimality of Fourier projections. **(82e:46038)**
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- Kuprin, V. A. Application of Faber series to an approximate solution of a problem of linear conjugation. (Russian) **(82e:41012)**
- Morris, Peter D. See Fisher, S. D.; et al., **(82e:46038)**
- Rusak, V. N. Approximation of periodic functions, differentiable in the sense of Weyl, by rational operators. (Russian. English summary) **(82i:41020)**
- Schempp, Walter Wiener-Hopf techniques in approximating holomorphic functions. **(82g:30060)**
- Schnabl, Roman Die Algebra der Bernsteinoperatoren und symmetrische Funktionen. **(82h:46060)**
- Stark, E. L. See Bleimann, G., **(82f:42013)**
- Swettis, John J. (with Wood, Bruce) A note on the degree of approximation with an optimal, discrete polynomial. **(82a:41020)**
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- Wood, Bruce See Swettis, John J., **(82a:41020)**
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41A36 Approximation by positive operators

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- Agar, M. A. Saturation, direct and inverse theorems for a certain sequence of linear positive operators. (Russian) **82g:41021**
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- Habib, Anwar (with Umar, S.) On generalized Bernstein polynomials. **82d:41028**
- Jimenez Pozo, Miguel A. Polynomial approximation of functions of several variables with the help of Korovkin-type theorems. (Spanish) **82m:41021**
- Kirkorov, Ivan See Veselinov, Vasil M., **82d:41029**
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- Mastroianni, Giuseppe (with Occorsio, Mario Rosario) On the derivatives of Stancu polynomials. (Italian. English summary) **82a:41019**
- van der Meer, P. J. C. See Sikkema, P. C.; et al., **82g:41024**
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- Mond, B. (with Vasudevan, R.) On approximation by linear positive operators. **82k:41014**
- Occorsio, Mario Rosario See Mastroianni, Giuseppe, **82a:41019**
- Roos, Maria See Sikkema, P. C.; et al., **82g:41024**
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- (with van der Meer, P. J. C.; Roos, Maria) Determination of the exact degree of local approximation by some linear positive operators involving the modulus of continuity of the p th derivative. **82g:41024**
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- Vasudevan, R. See Mond, B., **82k:41014**
- Veselinov, Vasil M. (with Kirkorov, Ivan) A general estimate for a class of linear operators. (Russian) **82d:41029**
- Videnskii, V. S. Approximation by Bernstein type operators. (Russian. Armenian and English summaries) **82k:41015**
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- Wood, Bruce See Eisenberg, Sheldon M., **82d:41027**

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- Brosowski, Bruno A Korovkin-type theorem for differentiable functions. **(82d:41048)**
- Derriennic, Marie Madeleine Sur l'approximation de fonctions intégrables sur $[0, 1]$ par des polynômes de Bernstein modifiés. (English summary) **(82m:41004)**
- Nessel, Rolf J. See Becker, Michael, **(82k:41004)**
- Rasa, I. On some results of C. A. Micchelli. **(82g:46025)**
- Stancu, D. D. Application of divided differences to the study of monotonicity of the derivatives of the sequence of Bernstein polynomials. **(82h:41008)**
- Sussich, Joseph F. See Bloom, Walter R., **(82e:43004)**
- Vasil'chenko, A. A. Korovkin systems in some function spaces. (Russian) **(82e:46031)**

41A40 Saturation

- Swettis, John J. (with Wood, Bruce) L_p saturation of positive convolution operators. **82e:41035**

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 Ugulava, D. K. On a saturation problem in the space $L_p(\mathbb{R}^n)$, $2 < p < \infty$. (Russian) **82a:41021**

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secondary classifications:

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 Hermann, Thomas (with Vértési, P.) On an interpolatory operator and its saturation. **(82j:41003)**
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 Vértési, P. See Hermann, Thomas, **(82j:41003)**

41A44 Best constants

- Paur, S. O. (with Roulier, John A.) Uniform Lipschitz and strong unicity constants on subintervals. **82d:41030**
 Roulier, John A. See Paur, S. O., **82d:41030**
 Runck, P. O. (with Sinwel, Herbert F.) On constants of approximation in the theorems of Jackson and Jackson-Timan. **82f:41029**
 Sinwel, Herbert F. See Runck, P. O., **82f:41029**

secondary classifications:

- Henry, Myron S. (with Swetits, John J.; Weinstein, Stanley E.) Orders of strong unicity constants. **(82k:41016)**
 Schurer, F. (with Steutel, F. W.) Exact degrees of approximation for two-dimensional Bernstein operators on C^1 . **(82h:41010)**
 Steutel, F. W. See Schurer, F., **(82h:41010)**
 Swetits, John J. See Henry, Myron S.; et al., **(82k:41016)**
 Weinstein, Stanley E. See Henry, Myron S.; et al., **(82k:41016)**

41A45 Approximation by arbitrary linear expressions

- Korničuk, M. P. Optimal reconstruction of functions and their derivatives in the L_p -metric. (Russian) **82f:41030**
 Schaback, Robert Numerical error evaluation in linear approximation—the least-squares case. **82c:41025**

secondary classifications:

- Cheney, E. W. See Light, William A., **(82d:41045)**
 Deutsch, Frank (with Lapidot, Eitan) Convergence from approximating subspaces. **(82m:41032)**
 Dunham, Charles B. The rate of convergence of discretization in Chebyshev approximation on rectangular sets. **(82f:41040)**
 Lapidot, Eitan See Deutsch, Frank, **(82m:41032)**
 Light, William A. (with Cheney, E. W.) Some best-approximation theorems in tensor-product spaces. **(82d:41045)**
 Lin, Pei Kee Best approximation in $(L_1 \otimes \mathbb{R})_{\infty}$. **(82i:41035)**
 Powell, M. J. D. (with Roberts, F. D. K.) A discrete characterization theorem for the discrete L_1 linear approximation problem. **(82h:41034)**
 Roberts, F. D. K. See Powell, M. J. D., **(82h:41034)**

41A46 Approximation by arbitrary nonlinear expressions; widths and entropy

- Desjatskova, N. V. Approximation of classes with a weight. (Russian) **82i:41027**
 Galeev, E. M. Diameters in the sense of Kolmogorov of an intersection of classes of periodic functions and finite-dimensional sets. (Russian) **82i:41028**
 Korničuk, M. P. Diameters in L_p of classes of continuous and differentiable functions, and optimal methods of coding and reconstructing functions and their derivatives. (Russian) **82i:41029**
 Maiorov, V. E. Linear diameters of Sobolev classes and chains of extremal subspaces. (Russian) **82j:41022**

secondary classifications:

- Dierieck, Claude Characterizations of good and best approximations in an arbitrary subset of a normed linear space. **(82d:41049)**
 Fisher, S. D. (with Micchelli, Charles A.) The n -width of sets of analytic functions. **(82b:30035)**
 (with Micchelli, Charles A.) The n -widths of sets of analytic functions. **(82j:30052)**
 Kaufman, Robert P. Metric entropy and ordinary differential equations. **(82c:34046)**
 Korničuk, M. P. Optimal reconstruction of functions and their derivatives in the L_p -metric. (Russian) **(82f:41030)**
 Micchelli, Charles A. See Fisher, S. D., **(82b:30035)** and **(82j:30052)**
 Smarzewski, Ryszard On characterization of nonlinear best Chebyshev approximations. **(82f:41044)**
 Vitushkin, A. G. Approximation of entire functions and signal coding with finite spectrum. (Russian) **(82b:30024)**

41A50 Best approximation, including Čebyšev systems

- Abdik, A. (with Yüksel, Ş.) On the Chebyshev approximation by $A + B^* \log(1 + CX)$. (Turkish summary) **82c:41036**
 Al-Rashed, Abdallah M. (with Darst, Richard B.) Convergence of best best L_p -approximations. **82j:41023**

- Berens, Hubert Best approximation in Hilbert space. **82i:41030**
 Borosh, L. (with Chui, Charles K.) A problem of Lorentz on approximation by incomplete polynomials. **82e:41037**
 Bridges, Douglas S. A constructive development of Chebyshev approximation theory. **82d:41031**
 A constructive proximality property of finite-dimensional linear subspaces. **82m:41024**
 Brosowski, Bruno (with Deutsch, Frank; Nürnberger, Günther) Parametric approximation. **82k:41033**
 Čahkier, M. A. Exponential polynomials with the least deviation from zero and optimal quadrature formulas. (Russian) **82m:41025**
 Chevalier, Georges Sur certaines applications de la notion de système de Tachebycheff au sens de S. Bernstein. **82e:41038**
 Chui, Charles K. See Borosh, L., **82e:41037**
 Darst, Richard B. Convergence of L_p approximations as $p \rightarrow \infty$. **82a:41022**
 See also Al-Rashed, Abdallah M., **82j:41023**
 Deutsch, Frank (with Nürnberger, Günther; Singer, Ivan) Weak Chebyshev subspaces and alternation. **82c:41026**
 See also Brosowski, Bruno; et al., **82k:41033**
 Dunham, Charles B. Discrete Chebyshev approximation: alternation and the Remez algorithm. **82i:41031**
 Failure of complex strong uniqueness. **82g:41025**
 A uniform constant of strong uniqueness on an interval. **82a:41023**
 The weakened first algorithm of Remez. **82m:41026**
 Eggert, Norman (with Lund, John) The cardinality of extreme sets of rational functions. **82d:41032**
 Fuchs, W. H. J. On Chebyshev approximation on sets with several components. **82j:41024**
 Glashoff, Klaus Restricted approximation by strongly sign-regular kernels: the finite bang-bang principle. **82c:41027**
 Haverkamp, Richard (with Zielke, Roland) On the embedding problem for Čebyšev systems. **82b:41023**
 Henry, Myron S. (with Swetits, John J.) Growth rates for strong unicity constants. **82g:41026**
 (with Swetits, John J.; Weinstein, Stanley E.) Orders of strong unicity constants. **82k:41016**
 Kenderov, Pet' r S. Approximation of plane convex compacta by polygons. **82f:41031**
 Kioustelidis, J. B. Optimal segmented approximations. (German summary) **82e:41032**
 Koltsov, A. V. Differentiability of the operator of best approximation. (Russian) **82f:41032**
 Kroó, Andráš The Lipschitz constant of the operator of best approximation. **82a:41024**
 A note on discrete Čebyšev approximation. **82b:41024**
 On the convergence of Pólya's algorithm. **82g:41027**
 Liang, Xue Zhang Interpolation and Čebyšev approximation of functions of several variables. (Chinese) **82e:41039**
 Lund, John See Eggert, Norman, **82d:41032**
 Mason, J. C. Recent advances in near-best approximation. **82b:41025**
 Nürnberger, Günther See Deutsch, Frank; et al., **82c:41026** and Brosowski, Bruno; et al., **82k:41033**
 Ollin, Harold Z. On best approximation by truncated series. **82i:41033**
 Osborne, M. R. An algorithmic approach to nonlinear approximation problems. **82d:41033**
 Popoviciu, Elena Sur un problème de la meilleure approximation. **82c:41028**
 Powell, M. J. D. (with Roberts, F. D. K.) A discrete characterization theorem for the discrete L_1 linear approximation problem. **82h:41034**
 Precupanu, Teodor Duality in best approximation problem. **82a:41025**
 Ramm, Alexander G. Approximation by entire functions. (Russian) **82j:41025**
 Riemenschneider, S. D. See Smith, Philip W., **82a:41026**
 Roberts, F. D. K. See Powell, M. J. D., **82h:41034**
 Romanov, V. S. Approximation of weakly Čebyšev systems by Čebyšev systems. (Russian. English summary) **82f:41033**
 Saff, E. B. (with Varga, R. S.) Remarks on some conjectures of G. G. Lorentz. **82e:41040**
 Schmidt, Darrell A characterization of strong unicity constants. **82d:41034**
 Schmidt, Eckard Chebyshev approximation with sums of logarithmic functions. **82j:41026**
 Shi, Xian Liang On approximation of continuous functions by de la Vallée Poussin means. (Chinese) **82b:41035**
 Shi, Ying Guang L approximation by generalized polynomials having bounded coefficients. (Chinese. English summary) **82f:41034**
 Best approximation having restricted ranges with nodes. (Chinese. English summary) **82g:41028**
 Minimization and best approximation. (Chinese. English summary) **82h:41036**
 Shisha, Oved Tchebycheff systems and best partial bases. **82i:41034**
 Singer, Ivan See Deutsch, Frank; et al., **82c:41026**
 Smirnov, G. A. See Zybin, L. M., **82e:41041**
 Smirnov, G. S. A property of continuous mappings of a segment into a Hilbert space. (Russian) **82j:41027**
 Smith, Philip W. (with Riemenschneider, S. D.) Approximation by discrete totally positive systems. **82a:41026**
 Sommer, M. Continuous selections for metric projections. **82h:41037**
 Studden, W. J. On a problem of Chebyshev. **82b:41026**
 Swetits, John J. See Henry, Myron S., **82g:41026** and **82k:41016**
 Varga, R. S. See Saff, E. B., **82e:41040**
 Vlasov, L. P. Approximate properties of subspaces of finite codimension in $C(Q)$. (Russian) **82b:41027**
 Weinstein, Stanley E. See Henry, Myron S.; et al., **82k:41016**
 Wolfe, Jerry M. Interpolation and best L_p local approximation. **82k:41017**
 Yüksel, Ş. See Abdik, A., **82c:41036**
 Zielke, Roland See Haverkamp, Richard, **82b:41023**

Zybin, L. M. (with Smirnov, G. A.) Approximation of continuous vector-valued functions. (Russian) **82c:41041**

secondary classifications:

- Baloganskii, V. S. Weak continuity of the metric projection on finite-dimensional spaces in $L_p(\mu)$. (Russian) **(82d:46043)**
- Bartelt, Martin W. (with Schmidt, Darrell) On strong unicity and a conjecture of Henry and Roullet. **(82d:41035)**
- Bennett, Colin (with Rudnick, Karl; Vaaler, Jeffrey D.) Best uniform approximation by linear fractional transformations. **(82b:41017)**
- Berdyshev, V. I. Variation of the norm in a problem of best approximation. (Russian) **(82c:41051)**
- Bojanov, Todor P. Exact asymptotic behavior of the best Hausdorff approximation of classes of functions with a given modulus of continuity. (Russian) **(82b:42001)**
- de Boor, Carl Convergence of abstract splines. **(82b:41042)**
- Braess, Dietrich Global analysis in nonlinear approximation and its application to exponential approximation. I. The uniqueness theorem for Haar-embedded manifolds. **(82m:41015a)**
- Global analysis in nonlinear approximation and its application to exponential approximation. II. Applications to exponential approximation. **(82m:41015b)**
- Brammigan, M. Approximation by vector-valued functions. **(82i:41040)**
- Bridges, Douglas S. \star Constructive functional analysis. **(82i:03094)**
- Brown, A. L. Chebyshev sets and facial systems of convex sets in finite-dimensional spaces. **(82f:52006)**
- Česnokov, A. S. Uniqueness of the solution of a problem of V. Markov. (Russian) **(82c:41030)**
- Chisholm, Michael E. A -regular mappings of 2^n -dimensional Euclidean space. **(82c:55022)**
- Collins, William D. An extension of the method of the hypercircle to linear operator problems with unilateral constraints. **(82d:41022)**
- Dem'janovič, Ju. K. On an error estimate for projection methods in the problem of best approximation. (Russian) **(82c:41053)**
- Deutsch, Frank (with Lapidot, Eitan) Convergence from approximating subspaces. **(82m:41032)**
- Dierckx, Claude Applications of a separation principle in good and best approximation theory. **(82c:41028)**
- Doronin, V. G. (with Ligin, A. A.) Best one-sided approximation on an interval. (Russian) **(82b:41005)**
- Duffin, Richard J. Rubel's universal differential equation. **(82j:41020)**
- Dunham, Charles B. (with Williams, Jack) Rate of convergence of discretization in Chebyshev approximation. **(82f:41024)**
- Dutka, Ju. V. Construction of a multidimensional piecewise continuous approximation. (Russian) **(82d:90105)**
- Feder, Moshe On a certain subset of $L_1(0, 1)$ and nonexistence of best approximation in some spaces of operators. **(82a:41018)**
- Geiser, James R. See Gray, Norman H.; et al., **(82c:86007)**
- Geiser, Peter A. See Gray, Norman H.; et al., **(82c:86007)**
- Glizzetti, Aldo (with Santucci Patini, Lia) A problem of approximation in $L^2[0, 1]$. (Italian) **(82i:41021)**
- Godini, G. The modulus of continuity of the set-valued metric projection. **(82b:41044)**
- Gray, Norman H. (with Geiser, Peter A.; Geiser, James R.) On the least-squares fit of small and great circles to spherically projected orientation data. **(82c:86007)**
- Henry, Myron S. (with Swetts, John J.; Weinstein, Stanley E.) Lebesgue and strong unicity constants. **(82g:41007)**
- Lapidot, Eitan See Deutsch, Frank, **(82m:41032)**
- Lau, K. K. (with Riha, W. O. J.) Characterization of best approximations in normed linear spaces of matrices by elements of finite-dimensional linear subspaces. **(82a:15023)**
- Leindler, László Strong approximation. (Hungarian) **(82c:42001)**
- Light, William A. Some optimality conditions for Chebyshev expansions. **(82d:41041)**
- Ligin, A. A. See Doronin, V. G., **(82b:41005)**
- Mal'nev, I. G. (with Smirnov, G. S.) Some properties of the best approximation in spaces with a mixed integral norm. (Ukrainian. English and Russian summaries) **(82k:41018)**
- Malozemova, L. K. A. O. Gelfond's polynomials. (Russian. English summary) **(82i:33023)**
- Nashed, M. Z. Best approximation problems arising from generalized inverse operator theory. **(82c:47017)**
- Nürnberg, Günther (with Singer, Ivan) Uniqueness of best approximations in spaces of continuous functions. **(82d:41037)**
- Riha, W. O. J. See Lau, K. K., **(82a:15023)**
- Rudnick, Karl See Bennett, Colin; et al., **(82b:41017)**
- Sahney, B. N. (with Singh, Sankatha P.) On best simultaneous approximation. **(82b:41021)**
- Santucci Patini, Lia See Glizzetti, Aldo, **(82i:41021)**
- Scherer, R. (with Zeller, K.) Gestufte Approximation in zwei Variablen. (English summary) **(82d:41046)**
- Schmidt, Darrell See Bartelt, Martin W., **(82d:41035)**
- Singer, Ivan See Nürnberg, Günther, **(82d:41037)**
- Singh, Sankatha P. See Sahney, B. N., **(82b:41021)**
- Smirnov, G. S. See Mal'nev, I. G., **(82k:41018)**
- Sum, Yong Sheng Mean approximation of a periodic function by the partial sums of its Fourier series. (Chinese. English summary) **(82h:42004)**
- Swetts, John J. See Henry, Myron S.; et al., **(82g:41007)**
- Temljakov, V. N. Correlations between best approximations of functions of two variables. (Russian) **(82c:41020)**
- Todd, John Some applications of elliptic functions and integrals. **(82a:65016)**
- Vaaler, Jeffrey D. See Bennett, Colin; et al., **(82b:41017)**
- Weinstein, Stanley E. See Henry, Myron S.; et al., **(82g:41007)**
- Williams, Jack See Dunham, Charles B., **(82f:41024)**
- Zeller, K. See Scherer, R., **(82d:41046)**

41A52 Uniqueness of best approximation

- Abatzoglou, Theagenis Uniqueness and continuity of best approximations. **82c:41029**
- Bartelt, Martin W. (with Schmidt, Darrell) On strong unicity and a conjecture of Henry and Roullet. **82d:41035**
- Chalmers, Bruce L. (with Taylor, Gerald D.) On the existence of strong unicity of arbitrarily small order. **82d:41036**
- De Biasi, F. S. (with Myjak, József) On the minimum distance theorem to a closed convex set in a Banach space. (Russian summary) **82m:41027**
- Fitzpatrick, Simon Metric projections and the differentiability of distance functions. **82b:41028**
- Kroó, Andrius On strong unicity of L_1 -approximation. **82j:41028**
- Lin, Pei Kee Best approximation in $(L_1 \oplus \mathbb{R})_\infty$. **82c:41035**
- Mal'nev, I. G. (with Smirnov, G. S.) Some properties of the best approximation in spaces with a mixed integral norm. (Ukrainian. English and Russian summaries) **82k:41018**
- Myjak, József See De Biasi, F. S., **82m:41027**
- Nürnberg, Günther (with Singer, Ivan) Uniqueness of best approximations in spaces of continuous functions. **82d:41037**
- Schmidt, Darrell See Bartelt, Martin W., **82d:41035**
- Singer, Ivan See Nürnberg, Günther, **82d:41037**
- Smirnov, G. S. See Mal'nev, I. G., **82k:41018**
- Strauß, Hans Uniqueness in L_1 -approximation for continuous functions. **82f:41035**
- Eindeutigkeit in der L_1 -Approximation. **82c:41042**
- Taylor, Gerald D. See Chalmers, Bruce L., **82d:41036**

secondary classifications:

- Abatzoglou, Theagenis Unique best approximation from a C^2 -manifold in Hilbert space. **(82b:58015)**
- Bosznay, Á. P. Remarks on the unique farthest point problem in some subspaces of C . **(82g:46058)**
- A remark on uniquely remotal sets in $C(K, X)$. **(82f:46016)**
- Dunham, Charles B. Failure of complex strong uniqueness. **(82g:41025)**
- Uniqueness in restricted range approximation with betweenness. **(82h:41028)**
- Eggert, Norman (with Lund, John) The cardinality of extreme sets of rational functions. **(82d:41032)**
- Kenderov, Pet'ar S. Approximation of plane convex compacta by polygons. **(82f:41031)**
- Lund, John See Eggert, Norman, **(82d:41032)**
- Narang, T. D. Unicity theorem and strict convexity of metric linear spaces. **(82g:46012)**
- Schmidt, Darrell A characterization of strong unicity constants. **(82d:41034)**
- Smirnov, G. A. See Zybin, L. M., **(82e:41041)**
- Zybin, L. M. (with Smirnov, G. A.) Approximation of continuous vector-valued functions. (Russian) **(82e:41041)**

41A55 Approximate quadratures

- Akopian, G. G. Sequences of cubature formulas for differentiable functions in domains with degenerate corners. (Russian) **82h:41038**
- Aljarrah, Radwan Error estimates for Gauss-Jacobi quadrature formulae with weights having the whole real line as their support. **82f:41036**
- Besov, O. V. Estimates of the error of cubature formulas with respect to smoothness of functions. (Russian) **82d:41038**
- Bojanov, B. D. Extremal problems in a set of polynomials with fixed multiplicities of zeros. **82k:41019**
- Frazier, R. See Lether, Frank G.; et al., **82j:41029**
- Germano, Bruna Examples of quadrature formulas associated with θ -orthogonal polynomials. (Italian) **82j:41029**
- Guliev, R. D. Convergence of interpolated quadrature formulas, containing derivatives, for singular integrals. (Russian) **82d:41039**
- A cubature formula for an iterated singular integral with Cauchy kernels. (Russian. Azerbaijani and English summaries) **82h:41029**
- Kuz'menkov, V. A. Conditions for the solvability of an inverse problem of the theory of cubature formulas. (Russian. English summary) **82c:41039**
- Kuz'mina, A. L. Point-interval quadrature formulas. (Russian) **82j:41030**
- Lether, Frank G. (with Wilhelmsen, D.; Frazier, R.) On the positivity of Cotes numbers for interpolatory quadratures with Jacobi abscissas. (German summary) **82g:41029**
- Lifanov, I. K. Quadrature formulas and the Poincaré-Bertrand formula for singular integrals. (Russian) **82d:41040**
- Meleško, A. N. Interpolation quadrature formulas for Schwarz and Hilbert integrals. (Russian) **82b:41030**
- Morelli, A. (with Nicolò-Amati Gori, L.) The convergence of certain quadrature formulas. (Italian. English summary) **82j:41031**
- Musae, B. I. On the convergence of a cubature process for a multidimensional singular integral. (Russian. Azerbaijani and English summaries) **82k:41020**
- Myslovskii, I. P. The approximation of multiple integrals by using interpolatory cubature formulae. **82b:41031**
- Nazarenko, N. A. Approximation of plane curves by parametric Hermitian splines. (Russian) **82c:41043**
- Nicolò-Amati Gori, L. See Morelli, A., **82j:41031**
- Panasovič, V. O. Estimate of the remainder of a cubature formula of Markov type in terms of the best approximation for functions of a low order of differentiability. (Ukrainian. English and Russian summaries) **82k:41021**
- Šabozov, M. On best cubature formulas with a weight. (Russian. Tajiki summary) **82h:41040**
- Šadimetov, H. M. See Žamalo, Z. Ž., **82f:41037**
- Schmid, H. J. Interpolatory cubature formulae and real ideals. **82b:41032**
- Seatzu, Sebastiano Best quadrature formulas in Sard's sense with almost all the coefficients equal. (Italian. English summary) **82k:41022**
- Vaskerit, V. L. On the convergence of Euler-Maclaurin quadrature formulas on a class of smooth functions. (Russian) **82m:41028**

Wilhelmsen, D. See Lether, Frank G.; et al., 82g:41029

Yavor, Elie Extremal problems on moment cones and the Karlin representation theorem. 82i:41023

Zamolov, Z. Ž. (with Šadimetov, H. M.) Coefficients of optimal quadrature formulas. (Russian) 82f:41037

Žensykhbaev, A. A. Monosplines and best quadrature formulas for some classes of nonperiodic functions. (Russian. English summary) 82e:41044

secondary classifications:

Anikonov, Ju. E. Questions on the solvability of problems of integral geometry. (Russian) (82k:53089)

Blinov, N. I. (with Vojtišek, L. V.) Construction of cubature formulas with regular boundary layer for rational polyhedra. (Russian) (82e:65026)

Bojanov, B. D. Uniqueness of the optimal nodes of quadrature formulae. (82d:65024)

Bose, S. C. (with Kundu, M. C.) Estimation of error in approximate numerical integration near a simple pole using Chebyshev points. (Czech summary) (82f:65019)

Čahkšev, M. A. Exponential polynomials with the least deviation from zero and optimal quadrature formulas. (Russian) (82m:41025)

Chen, T. H. Charles Asymptotic error estimates for Gaussian quadrature formulas. (82m:65019)

Engels, H. Gauss-Typ Quadraturformeln mit externen Stützstellen. (English summary) (82j:65013)

Freedon, Willi On integral formulas of the (unit) sphere and their application to numerical computation of integrals. (German summary) (82e:65023)

Gallone, S. Neutron transport half-range orthogonal polynomial sets and related quadrature sums and properties. (Italian and Russian summaries) (82h:82050)

Gavrea, I. "K" orthogonal polynomials. I. (Romanian. English summary) (82h:42027)

Gribble, J. D. Interpolatory inner product quadrature formulas. (82d:65026)

Haber, Seymour A number-theoretic problem in numerical approximation of integrals. (82e:65027)

Klokovs, J. See Vasil'ev, N. I., (82e:65012)

Kundu, M. C. See Bose, S. C., (82f:65019)

Lether, Frank G. Some observations on Gauss-Legendre quadrature error estimates for analytic functions. (82e:65024)

Panasović, V. O. Estimate of the remainder of a cubature formula with fixed nodes for functions of a low order of differentiability. (Russian) (82m:65020)

Soizurov, C. B. Weighted cubature formulas in weight spaces. (Russian) (82f:65026)

Vasil'ev, N. I. (with Klokovs, J.) The use of Čebyšev polynomials for calculation of integrals. (Russian) (82e:65012)

Application of Čebyšev polynomials to the calculation of double integrals.

(Russian) (82g:65015)

Vojtišek, L. V. See Blinov, N. I., (82e:65026)

Žensykhbaev, A. A. Optimal methods for reconstructing an integral. (Russian) (See 82d:65003)

41A58 Series expansions (e.g. Taylor, Lidstone series, but not Fourier series)

Džrbašan, M. M. (with Saakjan, B. A.) Expansions in series of generalized absolutely monotone functions. (Russian. English summary) 82k:41024

Light, William A. Some optimality conditions for Chebyshev expansions. 82d:41041

Nonlinear families of projections on $C[-1, 1]$. 82g:41030

Saakjan, B. A. See Džrbašan, M. M., 82k:41024

secondary classifications:

Bušmakın, V. N. (with İvanel, V. K.) Obreškov's formula for functions having discontinuities of the first kind. (Russian) (82c:26016)

Dzagnidze, O. P. L^2 -approximation by Hartogs-Laurent and Hartogs-Fourier polynomials. (Russian) (82b:32020)

Gröl, J. Negative Beantwortung einer Approximationsfrage. (82b:41019)

Haag, G. (with Hanggi, Peter) Continued fraction solutions of discrete master equations not obeying detailed balance. II. (82b:82013)

Hanggi, Peter See Haag, G., (82b:82013)

İvanel, V. K. See Bušmakın, V. N., (82c:26016)

Ollin, Harold Z. On best approximation by truncated series. (82i:41033)

Turbineer, A. V. A new approach to the eigenvalue problem in quantum mechanics: convergent perturbation theory for rising potentials. (82i:81036)

41A60 Asymptotic approximations, asymptotic expansions (steepest descent, etc.) [See also 30E15.]

Abramov, D. I. (with Slavjanov, S. Ju.) Asymptotic formulas for a class of integrals. (Russian. English summary) 82b:41033

Bañuelos, Alicia (with Depine, Ricardo Angel; Mancini, Roberto Claudio) Analytical expansions for Fermi-Dirac functions. 82e:41045

Buslaeva, M. V. Asymptotic behavior of sums of the type $\sum_{k=-m}^{n-1} \exp(i\omega \sqrt{n} k)$ when $n, m \rightarrow \infty$. (Russian. English summary) 82b:41034

Coleman, J. P. Divergence rules OK? 82a:41027

Depine, Ricardo Angel See Bañuelos, Alicia; et al., 82e:41045

Guseinov, G. A. Determination of asymptotic form of approximation of functions by generalized Gel'fond operators. (Russian) 82e:41046

Isakova, E. K. Approximations of some integrals depending on two parameters. (Russian) 82b:41041a

Uniform asymptotic representation of some integrals depending on two

parameters. (Russian) 82b:41041b

Janović, L. A. See Rancevič, V. A., 82e:41047

Kazakov, D. I. A method of summing sign-constant asymptotic series. (Russian. English summary) 82k:41025

Malgrange, Bernard Méthode de la phase stationnaire et sommation de Borel. 82a:41038

Mancini, Roberto Claudio See Bañuelos, Alicia; et al., 82e:41045

Ostrowski, Alexander On the remainder term of the de Moivre-Laplace formula.

82b:41035

Pokalo, A. K. (with Šloma, L. I.) On a representation of the Lebesgue constant by an asymptotic series. (Russian. English summary) 82i:41036

Rancevič, V. A. (with Janović, L. A.) A note on the asymptotic expansion of a type of continual integral. (Russian. English summary) 82e:41047

Riedel, Roland Asymptotische Darstellung verallgemeinerter Fourierintegrale. II.

82i:41037

Riekstina, V. Uniform asymptotic expansion of a certain class of integrals with exponential kernels. (Russian) 82e:41048

Riekstina, E. Asymptotic expansions of integrals of functions with logarithmic singularities. (Russian) 82f:41038

Sadykhov, V. E. Asymptotic series for a class of double integrals. (Russian) 82d:41042

Shi, Xian Liang Note on a problem of asymptotic expansion of oscillatory integrals. (Chinese) 82g:41031

Skinner, L. A. Uniformly valid expansions for Laplace integrals. 82i:41038a

Erratum: "Uniformly valid expansions for Laplace integrals". 82i:41038b

Slavjanov, S. Ju. See Abramov, D. I., 82b:41033

Šloma, L. I. See Pokalo, A. K., 82i:41036

Smotrov, Ju. A. Inversion of the Fourier transform by the method of an asymptotic extension of the interval. (Russian) 82f:41039

Sobolev, S. L. On extreme roots of Euler polynomials. (Russian) 82e:41049

Soni, K. (with Soni, Raj P.) A note on uniform asymptotic expansions of finite K , and related transforms with explicit remainder. 82a:41029

Soni, Raj P. See Soni, K., 82a:41029

Watanabe, Yoshihiro On a difference system of the integrals of Pochhammer. 82e:41050

Wong, Roderick Error bounds for asymptotic expansions of integrals. 82a:41030

Xu, Li Zhi (with Zhou, Yun Shi) On the asymptotic expansion of $\int f(x, \{Nx\}) dx$ and its application. (Chinese) 82i:41039

Zhou, Yun Shi See Xu, Li Zhi, 82i:41039

secondary classifications:

Abdullofizov, Š. Determination of asymptotic form of an approximation of a function by positive operators. (Russian. Tajiki summary) (82g:41020)

Anselone, P. M. (with Nashed, M. Z.) Perturbations of outer inverses. (82c:47016)

Björstad, Petter (with Dahlquist, Germund; Grosse, Eric) Extrapolation of asymptotic expansions by a modified Aitken δ^2 -formula. (82e:65005)

Böhmer, Klaus Discrete Newton methods and iterated defect corrections. (82j:65035)

Cant, R. J. (with Davis, A. C.) CP^{N-1} models beyond the leading order. (82c:81077)

Chan, C. K. (with Lu, P.) On the stability of the solution of Abel's integral equation.

(82i:81132)

Craig, A. D. D. The development of wavepackets in unstable flows. (82h:76036)

Cvili, M. M. Asymptotic properties of generalized Faber polynomials of two variables and of orthogonal polynomials connected with them. (Russian) (82g:33024)

Dahlquist, Germund See Björstad, Petter; et al., (82e:65005)

Davis, A. C. See Cant, R. J., (82c:81077)

Farkov, Ju. A. Asymptotic properties of generalized basis functions of Faber-Erohin.

(Russian) (82e:30052)

Floyd, Edward R. See Fröman, Nanny; et al., (82h:81031)

Fröman, Nanny (with Fröman, Per Olof) Comments on: "Higher order modified potentials for the effective phase integral approximation" [J. Math. Phys. 20 (1979), no. 1, 83-85; MR 80f:81031] by Edward R. Floyd. (82h:81031)

Fröman, Per Olof See Fröman, Nanny, (82h:81031)

Gingold, H. A new basis for singularly perturbed problems: a representation theorem. (82d:34061)

Glasser, M. L. Laplace transforms and asymptotic expansions of orthogonal polynomials. (82g:44008)

Grosse, Eric See Björstad, Petter; et al., (82e:65005)

Guerrieri, B. See Hunter, Charles H., (82b:65015a) and (82b:65015b)

Hunter, Charles H. (with Guerrieri, B.) Deducing the properties of singularities of functions from their Taylor series coefficients. (82b:65015a)

(with Guerrieri, B.) Erratum: "Deducing the properties of singularities of functions from their Taylor series coefficients". (82b:65015b)

Isakova, E. K. Some generalizations of the method of a stationary phase. (Russian) (82b:58068)

Janenko, N. N. See Urusov, A. I.; et al., (82i:65013)

Kajuk, Ja. F. ★Некоторые вопросы методов разложения по параметру. (Russian) [Some questions of the methods of expansion with respect to a parameter] (82e:00037)

Kazakov, D. I. (with Širkov, D. V.) Asymptotic series of quantum field theory and their summation. (82a:81033)

Kazarjan, S. S. On the asymptotic behavior of some Fourier integrals with logarithmic singularities. (Russian. Armenian summary) (82e:42011)

Kesarwani, R. N. (with Varshni, Y. P.) Eigenvalues of an anharmonic oscillator.

(82i:81038)

(with Varshni, Y. P.) The quantum pendulum in the WKB approximation. (82m:81022)

Kublašvili, M. D. Remark on a scheme for approximate calculation of singular integrals. (Russian) (82m:65015)

Leray, Jean Continu et discontinu; ondes et corpuscules. (82m:58051)

Lu, P. See Chan, C. K., (82i:81132)

Luke, Yudel L. See Ting, Bing Yuan, (82f:65022)

Meyer, Richard E. See Painter, J. F., (82c:34060)

Nagel, Josef Asymptotic properties of powers of Bernstein operators. (82f:41014)

Nashed, M. Z. See Anselone, P. M., (82c:47016)

Painter, J. F. (with Meyer, Richard E.) New connection method across more general turning points. (82c:34060)

Palamodov, V. P. Asymptotic behavior of oscillating integrals with an isolated stationary phase point. (Russian) (82g:58063)

- Riekstis, E. ★Обвёртывающие ряды. I. (Russian) [Enveloping series. I] (82h:40001a)
★Обвёртывающие ряды. II. (Russian) [Enveloping series. II] (82h:40001b)
- Scheil, Hans-Joachim Asymptotische Entwicklungen für die unvollständige Gammafunktion. (82d:33004)
- Semenov, V. N. Asymptotic behavior of an integral arising in the Tricomi problem. (Russian. English summary) (82h:35074)
- Širkov, D. V. See Kazakov, D. I., (82a:81033)
- Šokin, Ju. I. See Urusov, A. I.; et al., (82i:65013)
- Ting, Bing Yuan (with Luke, Yudell L.) Computation of integrals with oscillatory and singular integrands. (82f:65022)
- Todorov, T. D. Asymptotic numbers. I. Algebraic properties. (Russian summary) (82c:12036)
- Urusov, A. I. (with Šokin, Ju. I.; Janenko, N. N.) Qualitative investigation of difference schemes by the differential approximation method. (Russian) (82d:65013)
- Varshni, Y. P. See Kesawani, R. N., (82i:81038) and (82m:81022)
- Wimp, Jet Uniform scale functions and the asymptotic expansion of integrals. (82g:41002)
- Zolotarev, A. A. Development of ship waves. (82g:76013)
- 41A63 Multidimensional problems (should also be assigned at least one other classification number in this section)
- Baszenski, G. (with Delvos, F.-J.; Posdorf, H.) ★Darstellungsformeln zur zweidimensionalen reduzierten Hermite-Interpolation. (German) [Representation formulas for two-dimensional reduced Hermite interpolation] 82d:41043
- Brannigan, M. Approximation by vector-valued functions. 82e:41040
- Cheney, E. W. See Light, William A., 82d:41045
- Daugavet, V. A. Approximation of a function of two variables by the sum of the products of functions of one variable. (Russian) 82k:41026
- Delvos, F.-J. (with Schäfer, Werner) Boolean methods in surface interpolation. 82d:41044
See also Baszenski, G.; et al., 82d:41043
- Dunham, Charles B. The rate of convergence of discretization in Chebyshev approximation on rectangular sets. 82f:41040
- Leonov, A. I. See Soliev, Ju., 82f:41041
- Light, William A. (with Cheney, E. W.) Some best-approximation theorems in tensor-product spaces. 82d:41045
- Mason, J. C. Near-best multivariate approximation by Fourier series, Chebyshev series and Chebyshev interpolation. 82a:41031
- Posdorf, H. See Baszenski, G.; et al., 82d:41043
- Richter-Dyn, Nira A straightforward generalization of Diliberto and Straus' algorithm does not work. 82j:41032
- Sazonova, L. V. A remark on a problem on the approximation of a function of two variables. (Russian) 82m:41029
- Schäfer, Werner See Delvos, F.-J., 82d:41044
- Scherer, R. (with Zeller, K.) Gestufte Approximation in zwei Variablen. (English summary) 82d:41046
- Soliev, Ju. (with Leonov, A. I.) Approximation of functions of two variables in n -spaces. (Russian. Tajiki summary) 82f:41041
- Zeller, K. See Scherer, R., 82d:41046
- secondary classifications:
- Arioka, Shigekatsu See Ogawa, Shirō; et al., (82m:41006)
- Baszenski, G. (with Posdorf, H.; Delvos, F.-J.) Representation formulas for conforming bivariate interpolation. (82b:41003)
- Buck, R. Creighton The solutions to a smooth PDE can be dense in $C[I]$. (82k:41011)
- Cheney, E. W. See Light, William A., (82d:41023)
- Chisholm, J. S. R. Multivariate approximants with branch cuts. (82e:65019)
- Dahmen, Wolfgang A. (with Micchelli, Charles A.) On limits of multivariate B -splines. (82j:41013)
- Delvos, F.-J. See Baszenski, G.; et al., (82b:41003)
- Fesčiev, I. H. See Gahov, F. D., (82j:41018)
- Gadziev, A. D. Positive linear operators in weighted spaces of functions of several variables. (Russian. Azerbaijani and English summaries) (82g:41022)
- Gahov, F. D. (with Fesčiev, I. H.) Best approximations and differential properties of two conjugate periodic functions with two variables. (Russian. English summary) (82j:41018)
- Ganzburg, M. I. Multidimensional Jackson theorems. (Russian) (82m:41012)
- von Golitschek, Manfred Approximating bivariate functions and matrices by nomographic functions. (82f:65144)
- Golubov, B. I. Rate of convergence of integrals of Gauss-Weierstrass type for functions of several variables. (Russian) (82f:41025)
- Handscorn, D. C. Turning corners with four-sided polynomial patches. (82e:65014)
- Jakimovski, Amnon (with Russell, D. C.) Interpolation by functions with m th derivative in pre-assigned spaces. (82d:41004)
- Kida, Sōsaburō See Ogawa, Shirō; et al., (82m:41006)
- Kuz'menkov, V. A. Conditions for the solvability of an inverse problem of the theory of cubature formulas. (Russian. English summary) (82h:41039)
- Light, William A. (with Cheney, E. W.) On the approximation of a bivariate function by the sum of univariate functions. (82d:41023)
- Liavona, José G. Approximations of differentiable functions. (82b:46057)
- Marilewski, Adam Sur les puissances de l'opérateur généralisé de Bernstein des variables plusieurs. (82m:41023)
- Micchelli, Charles A. See Dahmen, Wolfgang A., (82j:41013)
- O'Farrell, Anthony G. Five generalisations of the Weierstrass approximation theorem. (82k:44004)
- Ogawa, Shirō (with Kida, Sōsaburō; Arioka, Shigekatsu) On a Jackson's type theorem in two dimension. (82m:41006)
- Posdorf, H. See Baszenski, G.; et al., (82b:41003)
- Russell, D. C. See Jakimovski, Amnon, (82j:41004)
- Wahba, Grace Spline bases, regularization, and generalized cross validation for solving approximation problems with large quantities of noisy data. (82b:65009)
- 41A65 Abstract approximation theory (approximation in normed linear spaces and other abstract spaces)
- Amir, D. (with Ziegler, Zvi) Relative Chebyshev centers in normed linear spaces. I. 82e:41030
- Averbuh, N. D. (with Makovoz, Ju. I.) On determining a mean error on compacta in problems of the theory of approximations. (Russian. English summary) 82d:41047
- Bahadur, Lal Finding out best approximation from closed zero-hyperplanes in normed linear spaces. 82j:41033
- Berdyshev, V. I. Equivalence of uniform continuity of a metric projection and a τ -projection. (Russian) 82b:41036
Variation of the norm in a problem of best approximation. (Russian) 82e:41051
- de Boor, Carl Convergence of abstract splines. 82b:41042
- Brosowski, Bruno A Korovkin-type theorem for differentiable functions. 82d:41048
- Buslaev, A. P. Approximation of an operator of differentiation. (Russian) 82k:41027
- Chalmers, Bruce L. (with Metcalf, F. T.) Multiplicative variations lead to the variational equations for minimal projections. 82e:41052
- Cheney, E. W. See Respass, John, 82b:41040 and Franchetti, Carlo, 82f:41042
- Cobzaș, Ștefan (with Mustăța, Costică) Norm-preserving extension of convex Lipschitz functions. 82j:41034
- Coimbra, Elvira ★On operators that preserve the best approximation in vectorial-normed spaces. 82m:41030
- Darst, Richard B. Approximation in L_p , $1 < p < \infty$. (See 82g:28002)
- Dem'janovič, Ju. K. On an error estimate for projection methods in the problem of best approximation. (Russian) 82e:41053
- Deutsch, Frank (with Kenderov, Pet' r S.) When does the metric projection admit a continuous selection? 82m:41031
(with Lapidot, Eitan) Convergence from approximating subspaces. 82m:41032
- Dierieck, Claude Characterizations of good and best approximations in an arbitrary subset of a normed linear space. 82d:41049
Applications of a separation principle in good and best approximation theory. 82k:41028
- Eichner, L. Existence of best nonlinear L_p -approximations. 82e:41054
- Flösser, Hans O. Korovkin closures in AM-spaces. 82c:41031
Sequences of positive contractions on AM-spaces. 82b:41043
- Franchetti, Carlo (with Cheney, E. W.) Simultaneous approximation and restricted Chebyshev centers in function spaces. 82f:41042
- Godini, G. The modulus of continuity of the set-valued metric projection. 82h:41044
- Gorenflo, Rudolf (with Hilpert, Martin) On the continuity of convexly constrained interpolation. 82e:41032
- Hilpert, Martin See Gorenflo, Rudolf, 82c:41032
- Ivan, Mircea Opérateurs d'interpolation dans des espaces abstraits. 82c:41033
- Janc, Mirko Characterization of the elements of τ -approximation. (Serbo-Croatian. English summary) 82b:41037
- Johnson, Jerry A. Strongly exposed points in $L^p(\mu, E)$. 82a:41032
- Kalik, Carol Génération d'éléments spline à l'aide des applications monotones. (Romanian summary) 82m:41033
- Kenderov, Pet' r S. See Deutsch, Frank, 82m:41031
- Lambert, Joseph M. Theory of nearest deviators. 82g:41032
- Lapidot, Eitan See Deutsch, Frank, 82m:41032
- Larkin, F. M. A probabilistic approach to the estimation of functionals. 82d:41050
- Light, William A. Central proximity maps. 82g:41033
- Makovoz, Ju. I. See Averbuh, N. D., 82d:41047
- Mamedhanov, Dz. I. (with Nersisjan, A. A.) Approximation in the metric of the space L_1 . (Russian) 82a:41033
- Marshall, Donald E. (with O'Farrell, Anthony G.) Uniform approximation by real functions. 82j:41035
- Mertens, H. J. (with Nessel, Rolf J.) An equivalence theorem concerning multipliers of strong convergence. 82f:41041a
(with Nessel, Rolf J.) Quasikonvexe Multiplikatoren starker Konvergenz. (Russian summary) 82f:41041b
- Metcalf, F. T. See Chalmers, Bruce L., 82e:41052
- Morris, Peter D. Chebyshev subspaces of L^1 with linear metric projection. 82b:41038
- Mustăța, Costică On the best approximation in metric spaces. 82c:41034
See also Cobzaș, Ștefan, 82j:41034
- Narang, T. D. On simultaneous furthest points. 82k:41029
- Nersisjan, A. A. See Mamedhanov, Dz. I., 82a:41033
- Nessel, Rolf J. See Mertens, H. J., 82i:41041
- Nevesenkov, N. V. Strict suns and lower semicontinuity of a metric projection in normed linear spaces. (Russian) 82b:41039
- Nishishiraho, Toshihiko Quantitative theorems on linear approximation processes of convolution operators in Banach spaces. 82m:41034
- O'Farrell, Anthony G. See Marshall, Donald E., 82j:41035
- Opfer, Gerhard On approximations in subnorms. 82a:41034
- Păltineanu, Gavril A Stone-Weierstrass theorem for Lindenstrauss-Wulbert subspaces with weights. (Romanian. English summary) 82d:41035
- Papini, P. L. Increasing the distance from the points of a set. 82f:41043
- Penot, Jean-Paul A characterization of tangential regularity. 82k:41030
- Reich, Simeon A remark on a problem of Asplund. (Italian summary) 82i:41042
- Respass, John (with Cheney, E. W.) Approximation problems in tensor product spaces. 82b:41040
- Rubinstein, G. Š. On Čebyšev rank for problems of uniform approximation in the space of \mathfrak{N} -bounded functions. (Russian) 82k:41031
- Sastry, Sundaram M. A. See Srinivasan, Sundarajan; et al., 82a:41035
- Shekhtman, Boris Some remarks on approximation in $C(\Omega)$. 82g:41034
The limits of abstract splines. 82g:41035

- Shi, Ying Guang The characterizations of best approximation in the space $L(X, \Sigma, \mu)$. (Chinese. English summary) **82g:41036**
- Smazewski, Ryszard On characterization of nonlinear best Chebyshev approximations. **82i:41044**
- Srinivasan, Sundarajan (with Sastry, Sundaram M. A.; Viswanath, K.) Orthogonality in Banach space and approximation theory. **82a:41035**
- Summers, W. H. Weighted approximation and localization. **82d:41051**
- Viswanath, K. See Srinivasan, Sundarajan; et al., **82a:41035**
- Vlasov, L. P. The character of generalized and classical elements of best approximation in relation to subspaces of finite codimension. (Russian) **82i:41045**
- Zamansky, Marc Approximation et analyse harmonique. (English summary) **82b:41041**
- Approximation et analyse harmonique. (English summary) **82a:41036**
- Ziegler, Zvi See Amir, D., **82c:41030**

secondary classifications:

- Ageev, A. L. (with Vasin, V. V.) Convergence of the generalized method of residuals and its discrete approximations. (Russian) **82c:65032**
- Ahmad, Khalil See Jain, Pawan Kumar, **(82h:46019)** and **(82m:46011)**
- Amir, D. (with Ziegler, Zvi) Characterizations of relative Chebyshev centers. **(82c:41018)**
(with Ziegler, Zvi) Construction of elements of the relative Chebyshev center. **(82h:41026)**
- Andó, Györgyi (with Lipsey, Zsolt) Polynomial approximations in space L_∞ . (Hungarian. English summary) **(82k:41003)**
- Berežnoi, E. I. Approximation spaces and interpolation. (Russian) **(82c:46037)**
- Bernardi, Christine Approximation numérique d'une bifurcation de Hopf. (English summary) **(82c:65035)**
- Bierstedt, Klaus-D. The approximation-theoretic localization of Schwartz's approximation property for weighted locally convex function spaces and some examples. **(82j:46031)**
- Bosznay, A. P. Two characterizations of Hilbert space by approximation theoretical properties. **(82d:46033)**
- Bridges, Douglas S. ★Constructive functional analysis. **(82k:03094)**
- Brosowski, Bruno (with Deutsch, Frank; Nürnberger, Günther) Parametric approximation. **(82h:41033)**
An application of Korovkin's theorem to certain partial differential equations. **(82f:46005)**
- Chalmers, Bruce L. Formulas for minimal projections. **(82i:46043)**
A natural simple projection with norm $\leq \sqrt{n}$. **(82m:41019)**
- Chui, Charles K. (with Smith, Philip W.; Ward, Joseph D.) Approximation by M -ideals in the disc algebra. **(82f:30032)**
- Cobzas, Ștefan (with Muntean, Ioan) Condensation of singularities and divergence results in approximation theory. **(82k:46004)**
- Darst, Richard B. Convergence of L_p approximations as $p \rightarrow \infty$. **(82a:41022)**
- Dayal, S. k -discrete differentials of certain operators on Banach spaces. **(82j:58017)**
- Delves, F.-J. (with Schäfer, Werner) Boolean methods in surface interpolation. **(82d:41044)**
(with Posdorf, H.) On abstract Boolean interpolation. **(82c:41002)**
- Deutsch, Frank See Brosowski, Bruno; et al., **(82h:41033)**
- Donner, Klaus Korovkin theorems for L^p -spaces. **(82d:41026)**
Korovkin theorems in L^p -spaces. **(82i:41025)**
- Ellis, A. J. Some approximation results for function spaces. **(82a:46050)**
- Flösner, Hans O. (with Irmisch, R.; Roth, Walter) Infimum-stable convex cones and approximation. **(82h:46009)**
- Franchetti, Carlo On the radial projection in Banach spaces. **(82c:46017)**
(with Papini, P. L.) Approximation properties of sets with bounded complements. **(82m:46016)**
- Gluskin, E. D. Lower bounds for the diameters of some finite-dimensional sets. (Russian) **(82c:46032)**
- Handel, David Approximation theory in the space of sections of a vector bundle. **(82h:55016)**
- Hedberg, Lars Inge Spectral synthesis and stability in Sobolev spaces. **(82a:46033)**
- Herndorf, Norbert Best Φ - and N_Φ -approximants in Orlicz spaces of vector valued functions. **(82m:46026)**
- Irmisch, R. See Flösner, Hans O.; et al., **(82h:46009)**
- Jain, Pawan Kumar (with Ahmad, Khalil) Best approximation in Banach spaces with unconditional Schauder decompositions. **(82h:46019)**
(with Ahmad, Khalil) Unconditional Schauder decompositions and best approximations in Banach spaces. **(82m:46011)**
- Kudrjavev, L. D. Construction of a sequence of compactly supported functions approximating functions of weight classes. (Russian) **(82j:46042)**
- Lau, Ka Sing Approximation by continuous vector-valued functions. **(82c:54016)**
- Light, William A. Nonlinear families of projections on $C[-1, 1]$. **(82g:41030)**
- Lipsey, Zsolt See Andó, Györgyi, **(82k:41003)**
- Mamedov, A. M. Approximation by entire functions with a weight on the domain $E = \{ |x_1| \geq 1 \} \cup \{ |x_2| \geq 1 \}$. (Russian) **(82c:41021)**
- Min'kova, R. M. Weak Korovkin spaces. (Russian) **(82g:46011)**
- Muntean, Ioan See Cobzas, Ștefan, **(82k:46004)**
- Nevesenko, N. V. Continuity of the diameter of a metric projection. (Russian) **(82c:46028)**
- Nürnberger, Günther See Brosowski, Bruno; et al., **(82h:41033)**
- Odinec, Vladimir P. Remarks on the uniqueness of minimal projection with nonunit norm. (Russian summary) **(82m:46017)**
- Papini, P. L. See Franchetti, Carlo, **(82m:46016)**
- Petrusev, Penčo P. Lower bounds for best rational approximations in the Hausdorff metric. (Russian) **(82g:41015)**
- Posdorf, H. See Delves, F.-J., **(82c:41002)**
- Precupanu, Teodor Duality in best approximation problem. **(82a:41025)**
- Reimer, Manfred Extremal bases for normed vector spaces. **(82c:46015)**
- Roth, Walter See Flösner, Hans O.; et al., **(82h:46009)**

- Schaback, Robert Numerical error evaluation in linear approximation—the least-squares case. **(82c:41025)**
- Schäfer, Werner See Delves, F.-J., **(82d:41044)**
- Šiškin, A. B. See Zamiatin, V. N., **(82m:46022)**
- Smith, Philip W. See Chui, Charles K.; et al., **(82f:30032)**
- Sommer, M. Continuous selections for metric projections. **(82h:41037)**
- Vasin, V. V. See Ageev, A. L., **(82c:65032)**
- Vlasov, L. P. Properties of generalized elements of the best approximation. (Russian) **(82c:46022)**
Approximate properties of subspaces of finite codimension in $C(Q)$. (Russian) **(82b:41027)**
- Ward, Joseph D. See Chui, Charles K.; et al., **(82f:30032)**
- Zamiatin, V. N. (with Šiškin, A. B.) Čebyšev centers and x -normal spaces. (Russian) **(82m:46022)**
- Ziegler, Zvi See Amir, D., **(82c:41018)** and **(82h:41026)**

41A80 Remainders in approximation formulas

41A99 Miscellaneous topics

- Il'jasov, N. A. Functions satisfying a Hölder condition. (Russian) **82d:41052**
- Yang, Yi Qun A kind of extremum in L space. (Chinese) **82f:41046**

secondary classifications:

- Dmitriev, N. P. See Gabušin, V. N., **(82c:41013)**
- Gabušin, V. N. (with Dmitriev, N. P.) Comparison theorems. (Russian) **(82c:41013)**
- Glashoff, Klaus Restricted approximation by strongly sign-regular kernels: the finite bang-bang principle. **(82c:41027)**
- Herrera, Ismael Boundary methods: a criterion for completeness. **(82a:45020)**
- Ionisjan, S. I. (with Privalov, A. A.) Divergence of a sequence of linear operations on a set of second category. (Russian) **(82a:40002)**
- Jochum, Peter The inverse Stefan problem as a problem of nonlinear approximation theory. **(82f:35184)**
- Potra, Florian Alexandru (with Plák, Vlastimil) Nondiscrete induction and a double step secant method. **(82a:65040)**
- Privalov, A. A. See Ionisjan, S. I., **(82a:40002)**
- Plák, Vlastimil See Potra, Florian Alexandru, **(82a:65040)**

42-XX FOURIER ANALYSIS

42-01 Elementary exposition, textbooks

- Rees, Charles Sparks (with Shah, Swarupchand M.; Stanojević, Časlav V.) ★Theory and applications of Fourier analysis. **82a:42001**
- Shah, Swarupchand M. See Rees, Charles Sparks; et al., **82a:42001**
- Stanojević, Časlav V. See Rees, Charles Sparks; et al., **82a:42001**
- Tolstov, G. P. ★Ряды Фурье. (Russian) [Fourier series] **82a:42002**

secondary classifications:

- Dreseler, Bernd See Schempp, Walter, **(82m:43001)**
- El'fimov, A. V. ★Математический анализ (специальные разделы). Часть I. (Russian) [Mathematical analysis (special sections). Part I] **(82k:00001a)**
- Föllinger, Otto ★Laplace- und Fourier-Transformation. (German) [Laplace and Fourier transformation] **(82k:44001)**
- Hainzl, Josef ★Mathematik für Naturwissenschaftler. (German) [Mathematics for scientists] **(82m:00008)**
- Schempp, Walter (with Dreseler, Bernd) ★Einführung in die harmonische Analyse. (German) [Introduction to harmonic analysis] **(82m:43001)**
- Stromberg, Karl R. ★Introduction to classical real analysis. **(82c:26002)**

42-02 Advanced exposition (research surveys, monographs, etc.)

42-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Carleson, Lennart The work of Charles Fefferman. **(82g:01044)**
- (Fefferman, Charles) See Carleson, Lennart, **(82g:01044)**
- Levitin, B. M. An outline of the history of the theory of almost-periodic functions. (Russian) **(82j:01056)**

42-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

- Diaconis, Persi Average running time of the fast Fourier transform. **(82f:68046)**

42-06 Proceedings, conferences, etc.

- Fourier analysis ★The study of Hardy spaces and several variable Fourier analysis by real analytical methods. (Japanese) **82a:42003**
- Hardy spaces ★The study of Hardy spaces and several variable Fourier analysis by real analytical methods. (Japanese) **82a:42003**
- Pisa ★Proceedings of the Seminar on Harmonic Analysis. **82m:42001**
- Proceedings
Seminar on Harmonic Analysis ★Proceedings of the Seminar on Harmonic Analysis. **82m:42001**

Seminar:

- Harmonic Analysis ★Proceedings of the Seminar on Harmonic Analysis. 82m:42001
 Study of Hardy spaces and several variable Fourier analysis by real analytical methods
 ★The study of Hardy spaces and several variable Fourier analysis by real analytical methods. (Japanese) 82a:42003

Symposium:

- Study of Hardy Spaces and Several Variable Fourier Analysis by Real Analytical Methods ★The study of Hardy spaces and several variable Fourier analysis by real analytical methods. (Japanese) 82a:42003

secondary classifications:

- Asterisque ★Representation theorems for Hardy spaces. (82a:32001)
 Representation theorems for Hardy spaces ★Representation theorems for Hardy spaces. (82a:32001)

42Axx Fourier analysis in one variable

42A05 Trigonometric polynomials, inequalities, extremal problems

- Fournier, John J. F. On a theorem of Paley and the Littlewood conjecture. 82i:42001
 Kristiansen, G. K. Corrigendum: "Some inequalities for algebraic and trigonometric polynomials" [J. London Math. Soc. (2) 20 (1979), no. 2, 300-314; MR 81e:42001]. 82a:42004

secondary classifications:

- Fisher, S. D. (with Morris, Peter D.; Wulbert, D. E.) Unique minimality of Fourier projections. (82e:46038)
 Maiorov, V. E. On a modification of the Bernstein-Nikol'skii inequality for trigonometric polynomials. (Russian) (82i:41018)
 Morris, Peter D. See Fisher, S. D.; et al., (82e:46038)
 Pichorides, S. K. A theorem of J.-F. Fournier on Littlewood's conjecture. (82d:10054)
 Wulbert, D. E. See Fisher, S. D.; et al., (82e:46038)
 Yang, Yi Qun A kind of extremum in L space. (Chinese) (82f:41046)

42A10 Trigonometric approximation

- Andreev, Andrei St. (with Popov, V. A.; Sendov, Blagovest) Jackson-type theorems for the best one-sided approximations by trigonometric polynomials and splines. (Russian) 82d:42001
 Balborodov, S. P. On the approximation of functions of several variables by rectangular de la Vallée Poussin sums. (Russian) 82i:42002
 Bojanov, Todor P. Exact asymptotic behavior of the best Hausdorff approximation of classes of functions with a given modulus of continuity. (Russian) 82h:42001
 Chandra, Prem A note on the degree of approximation of functions belonging to the Lipschitz class. (Turkish summary) 82h:42002
 Filippovskii, V. G. Differences of Cesàro polynomials. Differences of Fourier sums. (Russian) 82m:42002
 Geit, V. E. Best mean approximation of a cosine series with convex coefficients. (Russian) 82a:42005
 Goodrich, Robert K. (with Gustafson, Karl E.) Weighted trigonometric approximation and inner-outer functions on higher-dimensional Euclidean spaces. 82m:42003
 Govil, N. K. Remark on matrix transform of trigonometric series. 82e:42001
 Gustafson, Karl E. See Goodrich, Robert K., 82m:42003
 Ivanov, V. I. Direct and inverse theorems of approximation theory in the L_p metric for $0 < p < 1$. (Russian) 82i:42002
 (with Judin, V. A.) The trigonometric system in L_p , $0 < p < 1$. (Russian) 82h:42003
 Judin, V. A. See Ivanov, V. I., 82h:42003
 Leindler, László Derivative functions and strong approximation of Fourier series. 82e:42002
 Strong approximation. (Hungarian) 82c:42001
 Lyche, Tom A formula for the degree of approximation by trigonometric polynomials. 82c:42002
 Motornyi, V. P. Approximation in the mean of functions by Fourier-Legendre sums. (Russian) 82m:42004
 Popov, V. A. See Andreev, Andrei St.; et al., 82d:42001
 Rempulska, Lucyna On some means of Fourier series. 82c:42003
 Sakai, Ryozi Approximation of certain classes of periodic functions with many variables. 82h:42001
 Šalaev, V. V. Some relations between approximate characteristics of periodic functions of the class H^r . (Russian. English summary) 82e:42003
 Savić, Vladimir N. Evaluation of the supremum of norms of functions belonging to certain classes. (Serbo-Croatian. English summary) 82j:42001
 Savena, R. B. Degree of approximation of a function by Nörlund means of its Fourier series. 82i:42001
 Sendov, Blagovest See Andreev, Andrei St.; et al., 82d:42001
 Sevast'yanov, E. A. Uniform approximation of functions by Fourier sums. (Russian) 82k:42002
 Stepanec, O. I. On simultaneous approximation of periodic functions and their derivatives by Fourier sums. (Russian) 82j:42002
 Sun, Yong Sheng Mean approximation of a periodic function by the partial sums of its Fourier series. (Chinese. English summary) 82h:42004
 Taberski, Roman Integral formulae for trigonometric polynomials with applications. 82h:42002
 Totik, V. On the strong approximation of Fourier series. 82c:42004
 Xie, Ting Fan Modulus of continuity of fractional order and absolute convergence of Fourier series. (Chinese. English summary) 82h:42005
 Zaderet, N. N. Approximation by Fourier sums of classes of periodic functions of several variables determined by polyharmonic operators. (Russian) 82a:42006

- Simultaneous approximation of periodic functions and their derivatives by de la Vallée-Poussin sums. (Russian) 82m:42005

secondary classifications:

- Bojanić, R. (with Mazhar, S. M.) An estimate of the rate of convergence of the Nörlund-Voronoi means of the Fourier series of functions of bounded variation. (82c:41016)
 Davidčik, A. N. (with Ligin, A. A.) Exact constants in Jackson type inequalities. (Russian) (82j:41015)
 Ivanov, V. A. A problem on inequalities for norms of differential operators in homogeneous spaces. (Russian) (82c:49026)
 Kairies, H.-H. Mean values and function spaces. (82d:41006)
 Kroó, Andris A note on discrete Čebyšev approximation. (82h:41024)
 Laković, B. The imbedding and coincidence of certain classes of functions. (Russian) (82h:46050)
 Ligin, A. A. See Davidčik, A. N., (82j:41015)
 Litvinov, V. G. Approximation of functions by a tensor product of splines and trigonometric polynomials. (Russian) (82g:41011)
 Mazhar, S. M. See Bojanić, R., (82c:41016)
 Musaev, B. I. Approximation of periodic functions of two variables by Fourier sums and interpolation polynomials. (Russian) (82e:41010)
 Qureshi, K. A class of continuous functions and their degree of approximation. (82j:40004)
 Savić, Vladimir N. Estimate of the upper bound of the norm of some transformations of functions belonging to the classes $W'_{M,p}$ ($r \in \mathbb{N}$). (Serbo-Croatian. French summary) (82d:46055)
 Seleznev, O. V. Approximation of periodic Gaussian processes by trigonometric polynomials. (Russian) (82a:60054)
 Shi, Xian Liang On approximation of continuous functions by de la Vallée Poussin means. (Chinese) (82h:41035)
 Temirgaliev, N. Imbedding of certain classes of functions in $C([0, 2\pi]^m)$. (Russian) (82d:46043)
 Žemskyhaev, A. A. Spline-interpolation and the best approximation by trigonometric polynomials. (Russian) (82h:41014)

42A15 Trigonometric interpolation

- Bitzer, G. Über eine Minimaleigenschaft der äquidistanten trigonometrischen Interpolation in $2n+1$ Knoten. (English summary) 82f:42001
 Dzjadik, S. Ju. See Dzjadik, V. K.; et al., 82k:42003
 Dzjadik, V. K. (with Dzjadik, S. Ju.; Pripik, O. S.) On the asymptotic behavior of the Lebesgue constant in trigonometric interpolation. (Russian) 82k:42003
 Gavriljuk, V. T. Approximation of continuous periodic functions by trigonometric interpolating polynomials with equidistant nodes. (Russian) 82h:42006
 Pripik, O. S. See Dzjadik, V. K.; et al., 82k:42003
 Riemenschneider, S. D. (with Sharma, Ambikeshwar; Smith, Philip W.) Lacunary trigonometric interpolation: convergence. 82h:42003
 Sharma, Ambikeshwar See Riemenschneider, S. D.; et al., 82h:42003
 Smith, Philip W. See Riemenschneider, S. D.; et al., 82h:42003

secondary classifications:

- Čuprigin, S. A. Lacunary trigonometric interpolation of the type $(0, 1, \dots, p, q, r)$. (Russian) (82h:42006)
 Locher, F. Interpolation on uniform meshes by the translates of one function and related attenuation factors. (82c:65008)

42A16 Fourier coefficients, Fourier series of functions with special properties, special Fourier series

- D'jačenko, M. I. On generalized Fourier sine-series. (Russian) 82j:42003
 Some local properties of functions. (Russian) 82f:42002
 Gabelija, N. G. An infinite system of linear equations connected with the Steklov formula. (Russian. Georgian and English summaries) 82g:42001
 Oganessian, G. K. A property of functions of the class B_p . (Russian. Armenian summary) 82c:42005
 Pak, I. N. Monotonicity of sums of some trigonometric series. (Russian) 82e:42004
 Patel, C. M. See Puri, V. K., 82i:42003
 Puri, V. K. (with Patel, C. M.) On the degree of approximation of partial sums of Fourier-Bessel series. 82i:42003
 Ray, Brajakeshore (with Samal, M.) On the summability of a sequence associated with the Fourier coefficients of a monotonic function with an infinite limit. 82h:42007
 Rodin, V. A. Membership of the sum of a cosine series with monotone coefficients in a symmetric space. (Russian) 82a:42007
 Ryavec, C. The Poisson summation formula. 82j:42004
 Samal, M. See Ray, Brajakeshore, 82h:42007
 Schipp, Ferenc Fast Fourier transform and conditional expectation. 82a:42008
 Stadje, Wolfgang Eine Erweiterung des Riemann-Lebesgue-Lemmas. (English summary) 82a:42009
 Tuhliev, K. Fourier coefficients and best approximations of a class of convergence systems. (Russian. Tajiki summary) 82h:42008
 Vinogradova, I. A. Fourier coefficients of functions integrable in the sense of a generalized integral. (Russian) 82c:42006

secondary classifications:

- Ahmad, Z. U. (with Zaini, S. Zahid Ali) Integrability theorems for trigonometric series. (82h:42011)
 Bajpai, S. D. An exponential Fourier series for Fox's H -function. (82h:33005)
 Cenuşa, George Properties of the mean of a random function almost periodic in

- probability. The associated random Fourier series. (82h:60120b)
(with Săcuu, Ion) Some properties of random functions almost periodic in probability. (82h:60120a)
- Gelt, V. E. Best mean approximation of a cosine series with convex coefficients. (Russian) (82h:42005)
- Glasser, M. L. A class of Bessel summations. (82j:33015)
- Ivanov, V. I. (with Judin, V. A.) The trigonometric system in L_p , $0 < p < 1$. (Russian) (82h:42003)
- Judin, V. A. See Ivanov, V. I., (82h:42003)
- Kisljakov, S. V. Quantitative aspect of correction theorems. (Russian. English summary) (82c:28012)
- Lawrenson, P. J. (with Miller, T. J. E.) Transient solution of the diffusion equation by discrete Fourier transformation. (82c:78026)
- Miller, T. J. E. See Lawrenson, P. J., (82c:78026)
- Nedelčev, Hristo See Semerdžiev, Hristo, (82h:41021)
- Ostrogorski, Tatjana On integrability of trigonometric series with quasimonotone coefficients. (82m:42011)
- Pietsch, Albrecht Über die Verteilung von Fourierkoeffizienten und Eigenwerten—nicht nur ein historischer Überblick. (Russian and English summaries) (82c:47022)
- Săcuu, Ion See Cenușă, Gheorghe, (82h:60120a)
- Semerđžiev, Hristo (with Nedelčev, Hristo) Diagonal Padé approximants for a discontinuous function given by its Fourier series. (Bulgarian. Russian and English summaries) (82h:41021)
- Solev, V. N. Letter to the editors: "Absolutely regular trajectories in Hilbert space" [Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 22 (1971), 139–160; MR 46 #9721]. (Russian) (82i:46056)
- Zaini, S. Zahid Ali See Ahmad, Z. U., (82h:42011)

42A20 Convergence of Fourier and trigonometric series

- Calderón, Calisto P. On the Dini test and divergence of Fourier series. (82h:42009)
- Ionisjan, S. I. Trigonometric Fourier series of continuous functions that diverge on a given set. (Russian) (82h:42004)
- Koljada, V. I. Integral means and convergence of Fourier series at a point. (Russian. English summary) (82c:42007)
- Leindler, László Imbedding theorems and strong approximation. (82i:42004)
- Mamažanov, B. Unconditional convergence of orthogonal series with structural conditions on $(-\infty, -1] \cup [1, \infty)$. (Russian) (82a:42010)
- Prestini, Elena A generalized Bessel inequality. (82m:42006)
- Sövegjártó, Andris Remark to a paper of E. M. Nikišin. (82f:42003)
- Venugopal Rao, V. Convergence criteria for Fourier series. (82g:42002)
- Vértesi, P. On the convergence of Fourier series. (82e:42005)
- Wang, Si Lei Fourier series for the class of BMO functions. (Chinese. English summary) (82h:42010)
- Yoneda, Kaoru Control functions of a.e. convergences appearing in analysis. (82h:42005)
- Zerakidze, T. Š. Uniform convergence of Fourier series. (Russian) (82a:42011)

secondary classifications:

- Agrawal, Ram Kishor See Kalla, S. L.; et al., (82h:33011)
- Cuzick, Jack (with Lai, Tze Leung) On random Fourier series. (82f:60083)
- Goffman, Casper (with Waterman, Daniel) The localization principle for double Fourier series. (82d:42010)
- Goyal, S. P. See Kalla, S. L.; et al., (82h:33011)
- Heladze, Š. V. Convergence of Fourier series in general multiplicative systems. (Russian) (82h:42013)
- Kalla, S. L. (with Goyal, S. P.; Agrawal, Ram Kishor) On multiple integral transformations. (82h:33011)
- Lai, Tze Leung See Cuzick, Jack, (82f:60083)
- Stanojević, Časlav V. Classes of L^1 -convergence of Fourier and Fourier-Stieltjes series. (82g:42006)
- Stepanec, O. I. On simultaneous approximation of periodic functions and their derivatives by Fourier sums. (Russian) (82j:42002)
- Sužkov, M. V. The localization principle for the Laplace operator with piecewise constant coefficients on the surface of discontinuity of coefficients. (Russian) (82c:35051)
- Waterman, Daniel See Goffman, Casper, (82d:42010)
- Xie, Ting Fan Modulus of continuity of fractional order and absolute convergence of Fourier series. (Chinese. English summary) (82h:42005)

42A24 Summability of Fourier and trigonometric series

- Ahmad, Z. U. (with Zaini, S. Zahid Ali) Integrability theorems for trigonometric series. (82h:42011)
- Ali, Ziad Rushdi Nörlund summability of conjugate Fourier series. (82h:42012)
- Boss, R. P. See Men'sov, D. E., (82h:42004)
- Falaleev, L. P. Approximation properties of the matrix method for summation of Fourier-Chebyshev series. (Russian) (82i:42005)
- Heladze, Š. V. Convergence of Fourier series in general multiplicative systems. (Russian) (82h:42013)
- Hsiang, Fu Cheng On (L) summability of the conjugate series of a Fourier series. (82m:42007)
- Kazarjan, K. S. Abel summation of subsystems of a trigonometric system in the spaces $L^p(dp)$, $1 < p < \infty$. (Russian. Armenian summary) (82g:42003)
- Kudrjavec, G. I. Singularity conditions for an integral connected with the linear method of Fourier series. (Russian) (82d:42003)
- Men'sov, D. E. Limits of indeterminacy in measure of T -means of subseries of a trigonometric series. (82h:42004)
- Prasad, Kanhaiya On the $(N, p_n)C_1$ summability of a sequence of Fourier coefficients. (82g:42004)
- Prasad, Rajendra (with Saxena, Ashok K.) On the uniform matrix summability of

Fourier series. (82h:42014)

- (with Saxena, Ashok K.) Uniform matrix summability of Fourier series. (82j:42005)
See also Saxena, Ashok K., (82j:42006)
- Qureshi, K. On the degree of approximation of functions belonging to the Lipschitz class by means of a conjugate series. (82h:42005)
- Ray, Brajakeshore Fourier analysis: summability $[R, \log \omega, 1]$. (82h:42015)
- Saginjan, L. A. On a theorem of Marcinkiewicz-Zygmund. (Russian. Armenian and English summaries) (82h:42016)
- Sahney, B. N. (with Waterman, Daniel) On the summability of Fourier series. (82f:42004)
- Saxena, Ashok K. (with Prasad, Rajendra) On the summabilities of the derived series of the Fourier series. (82j:42006)
See also Prasad, Rajendra, (82h:42014) and Prasad, Rajendra, (82j:42005)
- Shi, Xian Liang On the summability of partial sums of Fourier series. (Chinese. English summary) (82f:42005)
- Siddiqi, Rafat Nabi Generalized absolute continuity of a function of Wiener's class. (82f:42006)
- Srivastava, R. S. L. Summability of Fourier series by a class of regular methods. (82j:42007)
- Totik, V. On the strong summability by the (C, α) -means of Fourier series. (82f:42007)
- Tripathy, N. Some theorems concerning the absolute Hausdorff summability of Fourier series and allied series. (82c:42008)
- Waterman, Daniel See Sahney, B. N., (82f:42004)
- Zaini, S. Zahid Ali See Ahmad, Z. U., (82h:42011)

secondary classifications:

- Asatiani, V. O. (with Čanturija, Z. A.) On absolute Cesàro summability of Fourier series. (Russian. Georgian and English summaries) (82e:40011)
- Čanturija, Z. A. See Asatiani, V. O., (82e:40011)
- Das, Gokulananda (with Mohapatra, P. C.) Necessary and sufficient conditions for absolute Nörlund summability of Fourier series. (82e:42007)
- D'jačenko, M. I. On generalized Fourier sine-series. (Russian) (82j:42003)
- Govil, N. K. Remark on matrix transform of trigonometric series. (82e:42001)
- Janakov, G. S. On singular integrals of conjugate functions. (Russian. Georgian and English summaries) (82c:42014)
- Jena, S. C. Absolute matrix summability of an associated Fourier series. (82h:40007)
- Kuz'mi, V. I. On absolute summation of series by the Rogosinski-Bernstein method. (Russian) (82h:40008)
- Leindler, László Derivative functions and strong approximation of Fourier series. (82c:42002)
- Mohapatra, P. C. See Das, Gokulananda, (82e:42007)
- Prestini, Elena A generalized Bessel inequality. (82m:42006)
- Ray, Brajakeshore (with Samal, M.) On the summability of a sequence associated with the Fourier coefficients of a monotonic function with an infinite limit. (82h:42007)
- Samal, M. See Ray, Brajakeshore, (82h:42007)
- Tandori, Károly Über die Summierbarkeit der Orthogonalreihen. (82h:43021)
- Tuhiev, K. Fourier coefficients and best approximations of a class of convergence systems. (Russian. Tajiki summary) (82h:42008)

42A28 Absolute convergence, absolute summability

- Asatiani, V. O. On absolute Cesàro summability of the Fourier series of the class $H^{\infty} \cap V[\nu]$. (Russian. Georgian and English summaries) (82f:42008)
- Barve, Saroj See Chandra, Prem, (82e:42006)
- Chandra, Prem (with Dikshit, G. D.) Summability $[R, \exp(\omega/(\log \omega)^{\alpha}), b]$ of a Fourier series. (82c:42009)
On the absolute Riesz summability factors for Fourier series and conjugate series. (82i:42006)
(with Barve, Saroj) Application of absolute matrix summability to Fourier and allied series. (Arabic summary) (82e:42006)
Absolutely summable Fourier expansion with and without multipliers. (82h:42009)
- Das, Gokulananda (with Mohapatra, P. C.) Necessary and sufficient conditions for absolute Nörlund summability of Fourier series. (82e:42007)
- Dikshit, G. D. On absolute summability factors for Fourier series. (82d:42004)
Absolute Nörlund summability factors of a Fourier series. (82i:42006)
(with Rees, Charles Sparks) Absolute Riesz summability of Fourier series. I. (82h:42007)
See also Chandra, Prem, (82c:42009)
- Dikshit, H. P. (with Dubey, S. N.) $[C, 1]$ summability of series associated with Fourier series. (82e:42008)
- Dubey, S. N. See Dikshit, H. P., (82e:42008)
- Gogoladze, L. D. On the problems of L. Leindler concerning the approximation of Fourier series and the Lipschitz classes. (Russian. Georgian and English summaries) (82i:42007)
- Jena, S. C. See Kishore, Nand, (82c:42010)
- Kahane, Jean-Pierre (with Katznelson, Yitzhak) Homéomorphismes du cercle et séries de Fourier absolument convergentes. (English summary) (82g:42005a)
- Katznelson, Yitzhak See Kahane, Jean-Pierre, (82g:42005a)
- Kishore, Nand (with Jena, S. C.) Absolute Nörlund summability of a Fourier series and its conjugate series. (82c:42010)
- Lal, Shiva Narain On the absolute Nörlund summability factors of a Fourier series. (82m:42009)
(with Singh, Awadhesh Kumar) Absolute Nörlund summability of Fourier integrals. (82d:42005)
(with Singh, K. N.) On the absolute summability of weighted Fourier series by Nörlund means. (82m:42008)
- Mohapatra, P. C. See Das, Gokulananda, (82e:42007)
- Okuyama, Yasuo (with Tsuchikura, Tamotsu) On the absolute Riesz summability of orthogonal series. (Russian summary) (82k:42008)
- Olevskii, A. M. Change of variable and absolute convergence of the Fourier series. (Russian) (82g:42005b)

- Patadia, J. R. (with Patel, G. B.) On the absolute convergence of lacunary Fourier series. **82c:42011**
- Patel, G. B. See Patadia, J. R., **82c:42011**
- Pritula, Ja. G. Tests for absolute convergence of Fourier series of almost periodic functions of bounded variation. (Russian) **82c:42012**
- Ray, Brajakhishore On the bounded variation of the first logarithmic mean of a function. **82j:42008**
- Rees, Charles Sparks See Dikshit, G. D., **82c:42007**
- Singh, Awadhesh Kumar See Lal, Shiva Narain, **82d:42005**
- Singh, K. N. See Lal, Shiva Narain, **82m:42008**
- Tsuchikura, Tamotsu See Okuyama, Yasuo, **82c:42008**
- Urbaniska, Władysław On absolute convergence of series of expected values of Fourier coefficients of random functions. I. **82c:42009**

secondary classifications:

- Ahmad, Z. U. (with Khan, F. M.) Absolute Nörlund summability factors of infinite series with applications. **(82m:40006)**
- Hotta, G. C. (with Padhi, T. C.) On $[\bar{N}, p_n]$ summability of an associated conjugate series of a Fourier series. **(82g:42007)**
- Hruščev, S. V. (with Kahane, Jean-Pierre; Katznelson, Yitzhak) Mouvement brownien et séries de Fourier absolument convergentes. (English summary) **(82c:60066)**
- Kahane, Jean-Pierre See Hruščev, S. V.; et al., **(82c:60066)**
- Katznelson, Yitzhak See Hruščev, S. V.; et al., **(82c:60066)**
- Khan, F. M. See Ahmad, Z. U., **(82m:40006)**
- Lal, Shiva Narain (with Singh, K. N.) Allied integral and absolute functional Nörlund method of summability. **(82f:42010)**
- Maravić, Manojlo Summability of derived multiple Fourier series related to slowly oscillating functions with remainder term. (Serbo-Croatian summary) **(82k:42012)**
- Mikosz, Mirosława The modulus of variation and convergence of double Fourier gap series. **(82g:42011)**
- Misra, Arati See Ray, Brajakhishore, **(82h:42007)**
- Padhi, T. C. See Hotta, G. C., **(82g:42007)**
- Ray, Brajakhishore (with Misra, Arati) On the absolute matrix summability of the series conjugate to a Fourier series. **(82h:42007)**
- Singh, K. N. See Lal, Shiva Narain, **(82f:42010)**
- Spevakov, V. N. Absolute summability of orthogonal series by methods (E, q) . (Russian) **(82j:42013)**

42A32 Trigonometric series of special types (positive coefficients, monotonic coefficients, etc.)

- Beriša, M. Q. Estimate of the Fourier coefficients of the periodic functions of class $H(p, k, q)$ by best approximations. (Serbo-Croatian. Russian summary) **82j:42009**
- Esmaganbetov, M. G. On the constructive characteristic of elements of the space $L_p[0, 2\pi]$. (Russian) **82m:42010**
- Laurinćikas, A. Large deviations of trigonometric polynomials. (Russian. Lithuanian and French summaries) **82k:42009**
- Malešević, Jovan V. Estimates of the modulus of a Fourier series of certain classes of functions from L . (Serbo-Croatian. Russian summary) **82j:42010**
- Ostrogorski, Tatjana On integrability of trigonometric series with quasimonotone coefficients. **82m:42011**
- Stanojević, Časlav V. Classes of L^1 -convergence of Fourier and Fourier-Stieltjes series. **82j:42006**

secondary classifications:

- Pak, I. N. Monotonicity of sums of some trigonometric series. (Russian) **(82c:42004)**

42A38 Fourier and Fourier-Stieltjes transforms and other transforms of Fourier type

- Boman, Jan Equivalence of generalized moduli of continuity. **82m:42012**
- Elhrenpreis, Leon Spectral gaps and lacunas. (French summary) **82c:42010**
- Gaimmazarov, G. Moduli of smoothness of fractional order of functions defined on the whole real axis. (Russian. Tajiki summary) **82j:42011**
- Graham, S. W. (with Vaaler, Jeffrey D.) A class of extremal functions for the Fourier transform. **82i:42008**
- Kamoliddinov, D. See Krainova, L. I., **82h:42017**
- Kazarjan, S. S. On the asymptotic behavior of some Fourier integrals with logarithmic singularities. (Russian. Armenian summary) **82c:42011**
- Krainova, L. I. (with Kamoliddinov, D.) Approximation of the Riesz means of a Fourier integral and of the conjugate integral by singular integrals. (Russian. Tajiki summary) **82h:42017**
- Lal, Shiva Narain (with Singh, K. N.) Allied integral and absolute functional Nörlund method of summability. **82f:42010**
- Lukacs, Eugene Inequalities for Fourier-Stieltjes transformations of functions of bounded variation. **82f:42011**
- Olšov, M. N. Summation of Fourier integrals by the Riesz method. (Russian) **82i:42009**
- Otto, Edward An elementary proof of Fourier's formula. **82f:42012**
- Singh, K. N. See Lal, Shiva Narain, **82f:42010**
- Szeptycki, P. On some problems related to the extended domain of the Fourier transform. **82a:42012**
- Vaaler, Jeffrey D. See Graham, S. W., **82i:42008**

secondary classifications:

- Andersson, Roger Power bounded restrictions of Fourier-Stieltjes transforms. **(82d:43003a)**
- See also Svensson, Erik, **(82d:43003b)**

- Benedetto, John J. The theory of constructive signal analysis. **(82m:94022)**
- Bhise, V. M. See Dighe, Madhavi, **(82h:26022)**
- Candel, Sébastien M. Dual algorithms for fast calculation of the Fourier-Bessel transform. **(82h:65092)**
- Diaconis, Persi Average running time of the fast Fourier transform. **(82f:68046)**
- Dighe, Madhavi (with Bhise, V. M.) On the generalisation of Beesack's extension of Opial's inequality. **(82h:26022)**
- Föllinger, Otto ★Laplace- und Fourier-Transformation. (German) [Laplace and Fourier transformation] **(82h:44001)**
- Freeden, Willi See Müller, Claus, **(82d:10071)**
- Ishikawa, Shiro Some remark on Tauberian theorem. **(82m:46039)**
- Kaufman, Robert P. Continued fractions and Fourier transforms. **(82h:10065)**
- Kim, Joung Kook On the results of invariant sets under translation for probability measure. (Korean summary) **(82g:28005)**
- Kodek, Dušan M. Conditions for the existence of fast number-theoretic transforms. **(82c:94032)**
- Lal, Shiva Narain (with Singh, Awadhesh Kumar) Absolute Nörlund summability of Fourier integrals. **(82d:42005)**
- Luong, N. C. (with Szász, Árpád) Remarks on a functional calculus based on Fourier series. **(82a:43004)**
- Müller, Claus (with Freeden, Willi) Multidimensional Euler and Poisson summation formulas. **(82d:10071)**
- Neuman, Edward Moments and Fourier transforms of B -splines. **(82c:41017)**
- Pigno, Louis Small sets in the support of a Fourier-Stieltjes transform. **(82k:43006)**
- Prudnikov, A. P. Watson operators and their application to the solution of certain problems of the theory of heat conduction. (Russian) **(82a:35052)**
- Riedel, Roland Asymptotische Darstellung verallgemeinerter Fourierintegrale. II. **(82i:41037)**
- Savić, Vladimir N. Calculation of the suprema of norms of some transformations of functions that belong to the classes $W_0^r H_\omega$ ($r \in \mathbb{N}$). (Serbo-Croatian. French summary) **(82j:42014)**
- Singh, Awadhesh Kumar See Lal, Shiva Narain, **(82d:42005)**
- Smotrov, Ju. A. Inversion of the Fourier transform by the method of an asymptotic extension of the interval. (Russian) **(82f:41039)**
- Svensson, Erik A note on: "Power bounded restrictions of Fourier-Stieltjes transforms" [Math. Scand. 46 (1980), no. 1, 129-153] by R. Andersson. **(82d:43003b)**
- Szász, Árpád See Luong, N. C., **(82a:43004)**
- Zotikov, S. V. Approximation of continuous and monotone functions by their Fourier-Haar integrals. (Russian) **(82c:41022)**

42A45 Multipliers

- Bavinek, H. (with Trebels, Walter) On M_q^s multipliers for Jacobi expansions. **82c:42013**
- Trebels, Walter See Bavinek, H., **82c:42013**

secondary classifications:

- Koosis, Paul Entire functions of exponential type as multipliers for weight functions. **(82m:30033)**
- Luong, N. C. (with Szász, Árpád) Remarks on a functional calculus based on Fourier series. **(82a:43004)**
- Szász, Árpád See Luong, N. C., **(82a:43004)**

42A50 Conjugate functions, conjugate series, singular integrals

- Bleimann, G. (with Stark, E. L.) Kernels of finite oscillations and convolution integrals. **82f:42013**
- Falaleev, L. P. Approximation of conjugate functions by Cesàro sums. (Russian) **82d:42006**
- Halmuradov, E. A new metric characteristic of summable functions and its application to a singular integral. (Russian) **82h:42006**
- ul-Haq, Fazl On uniform Nörlund summability of the conjugate derived Fourier series. **82j:42012**
- Hotta, G. C. (with Padhi, T. C.) On $[\bar{N}, p_n]$ summability of an associated conjugate series of a Fourier series. **82g:42007**
- Janakov, G. S. On singular integrals of conjugate functions. (Russian. Georgian and English summaries) **82c:42014**
- Kacnel'son, V. E. When is L^2 the direct sum of H^2 and uH^2 ? (Russian) **82m:42013**
- Khanh, Bui Doan Intégrales de Marcinkiewicz du type des commutateurs de A. P. Calderón. (English summary) **82h:42018**
- Misra, Arati See Ray, Brajakhishore, **82h:42007**
- Padhi, T. C. See Hotta, G. C., **82g:42007**
- Ray, Brajakhishore (with Misra, Arati) On the absolute matrix summability of the series conjugate to a Fourier series. **82h:42007**
- Siddiqi, Rafat Nabi A note on a theorem of Fejér. **82d:42007**
- Spitkovskii, I. M. Multipliers that do not affect factorizability. (Russian) **82g:42008**
- Stark, E. L. See Bleimann, G., **82f:42013**

secondary classifications:

- Bruna, Joaquim Boundary interpolation sets for holomorphic functions smooth to the boundary and BMO. **(82h:30037)**
- Gadziev, N. M. Strongly local convergence of singular integrals depending on two parameters. (Russian. Azerbaijani and English summaries) **(82m:41016)**
- Guliev, R. D. Convergence of interpolated quadrature formulas, containing derivatives, for singular integrals. (Russian) **(82d:41039)**
- Izrailova, M. M. The rate of convergence of multiple conjugate series of functions whose continuity measure is given in the mean. (Russian. Tajiki summary) **(82f:42014)**
- Jones, Roger L. An analog of the Marcinkiewicz integral in ergodic theory. **(82m:28034)**
- Totik, V. On the continuity of functions in connection with a problem of V. G. Krotov. (Russian summary) **(82h:26008)**

42A55 Lacunary series of trigonometric and other functions; Riesz products

- Čuprigin, S. A. Lacunary trigonometric interpolation of the type $(0, 1, \dots, p, q, r)$. (Russian) **82h:42008**
 Kawata, Tatsuo ★ Gap theorems in Fourier analysis. (Japanese) **82i:42010**
 Orlov, E. V. Coefficients of Fourier series in Sidon sets. (Russian) **82i:42011**
 Lacunary trigonometric series and complementability in L^p . (Russian) **82h:42019**

secondary classifications:

- Anderson, James Milne (with Newman, Donald J.) On the coefficients of lacunary power series. **(82e:40003)**
 Fournier, John J. F. On a theorem of Paley and the Littlewood conjecture. **(82i:42001)**
 Johansson, Bo A general high indices theorem with an application to a conjecture by Rényi. **(82e:40006)**
 Kaufman, Robert P. On the approximation of lacunary series by Brownian motion. **(82i:10065)**
 Newman, Donald J. See Anderson, James Milne, **(82e:40003)**
 Takahashi, S. The functional central limit theorem for lacunary trigonometric series. **(82d:60061)**

42A61 Probabilistic methods

- Spevakov, V. N. Absolute summability of orthogonal series by methods (E, q) . (Russian) **82j:42013**

secondary classifications:

- Burkholder, D. L. Martingale theory and harmonic analysis in Euclidean spaces. **(82c:60089)**

42A63 Uniqueness of trigonometric expansions, uniqueness of Fourier expansions, Riemann theory, localization

- Gorbačuk, M. L. See Gorbačuk, V. I., **82d:42008**
 Gorbačuk, V. I. (with Gorbačuk, M. L.) Trigonometric series and generalized periodic functions. (Russian) **82d:42008**
 Kita, Hiroo Uniqueness problem for some classes of trigonometrical series. **82k:42010**

42A65 Completeness of sets of functions

- Zalik, R. A. The fundamentality of sequences of translates. **82d:42009**

secondary classifications:

- Džrbašan, M. M. Characteristic of closed linear hulls of two families of incomplete systems of analytic functions. (Russian) **(82d:30007)**

42A70 Trigonometric moment problems

42A75 Classical almost periodic functions, mean periodic functions [See also 43A60.]

- Cheng, Nai Dong Constructive properties of a kind of uniformly almost periodic functions. (Chinese. English summary) **82e:42012**
 Džafarov, A. S. (with Mamedov, G. A.) Theorems for the representation of a class of almost-periodic functions. (Russian. Azerbaijani and English summaries) **82h:42020**
 Johnson, Russell A. Almost-periodic functions with unbounded integral. **82e:42013**
 Mamedov, G. A. See Džafarov, A. S., **82h:42020**
 Muntean, Ioan Sur l'associativité de la convolution des fonctions presque-périodiques. (Romanian summary) **82g:42009**

secondary classifications:

- Cenușă, Gheorghe (with Săcuu, Ion) Sequences of random variables almost periodical in probability. (French and Russian summaries) **(82b:60057)**
 Daboussi, Hédi Caractérisation des fonctions multiplicatives p.p. B^A à spectre non vide. **(82f:10064)**
 Levitan, B. M. An outline of the history of the theory of almost-periodic functions. (Russian) **(82j:01056)**
 Săcuu, Ion See Cenușă, Gheorghe, **(82b:60057)**
 Slijusarčuk, V. E. Bounded and almost periodic solutions of functional equations. (Russian) **(82f:39011)**
 Suleimanov, S. P. Almost periodic functions of several variables with respect to Hausdorff metrics and some of their properties. (Russian. Azerbaijani and English summaries) **(82e:42019)**

42A82 Positive definite functions

secondary classifications:

- Fischer, David R. Functions positive-definite on \mathbb{R}^3 and the Heisenberg group. **(82m:43009)**
 Rahman, Mizan A product formula and a nonnegative Poisson kernel for Racah-Wilson polynomials. **(82e:33012)**

42A85 Convolution, factorization

- Savić, Vladimir N. Calculation of the suprema of norms of some transformations of functions that belong to the classes $W_0^r H_\omega$ ($r \in \mathbb{N}$). (Serbo-Croatian. French summary) **82j:42014**

secondary classifications:

- Sato, Enji A note on some singular measures. **(82c:43001)**
 Spitkovskii, I. M. Multipliers that do not affect factorizability. (Russian) **(82g:42008)**

42A99 None of the above, but in this section

- Doss, Raouf Elementary proof of the Rudin-Carleson and the F. and M. Riesz theorems. **82g:42010**
 Laković, B. (with Potapov, M. K.) On the question of the interrelation of certain classes of functions. (Russian) **82e:42012**
 Potapov, M. K. See Laković, B., **82e:42012**

secondary classifications:

- Dym, Harry (with Gohberg, Israel) Addendum: "On an extension problem, generalized Fourier analysis, and an entropy formula" [Integral Equations Operator Theory 3 (1980), no. 2, 143–215; MR 81g:42018]. **(82e:42014)**
 Gohberg, Israel See Dym, Harry, **(82e:42014)**
 Jasiulis, A. Transformations of power series into trigonometric series and back. (Russian. Lithuanian and German summaries) **(82h:30001)**
 Kondratjuk, A. A. The Fourier series method for entire and meromorphic functions of completely regular growth. II. (Russian) **(82h:30027)**
 Lawton, Wayne Uniqueness results for the phase-retrieval problem for radial functions. **(82m:94010)**

42Bxx Fourier analysis in several variables

42B05 Fourier series and coefficients

- Bicaș, M. G. Multiple trigonometric series with monotone coefficients. (Russian. English and Georgian summaries) **82b:42009**
 Goffman, Casper (with Waterman, Daniel) The localization principle for double Fourier series. **82d:42010**
 Golubov, B. I. A generalized symmetric derivative and the summability of multiple trigonometric series by the Lebesgue method. (Russian) **82k:42011**
 Grigorjan, M. Ž. Convergence in the metric L_p , $0 < p < 1$, of double Fourier series of summable functions. (Russian. Armenian and English summaries) **82a:42013**
 Izrailova, M. M. The rate of convergence of multiple conjugate series of functions whose continuity measure is given in the mean. (Russian. Tajiki summary) **82f:42014**
 Kaul, B. N. (with Singh, Vijendra Pal) A note on almost convergence of functions. **82j:42015**
 Kim, Chong Rae Restricted and unrestricted convergence of approximate identities in product spaces. **82b:42013**
 Kohn, M. J. Spherical summability of differentiated multiple Fourier series. **82c:42015**
 Korczak, Jadwiga On some estimates of the integral moduli of continuity for functions of many variables by means of multiple Fourier series. **82i:42014**
 Lu, Shan Zhen Spherical integrals and convergence of spherical Riesz means. (Chinese) **82h:42021**
 Maravić, Manojlo Summability of derived multiple Fourier series related to slowly oscillating functions with remainder term. (Serbo-Croatian summary) **82k:42012**
 Mikosz, Mirosława The modulus of variation and convergence of double Fourier gap series. **82g:42011**
 Nikol'skaja, N. S. More on approximation of periodic functions of the classes SH_p by Fourier sums. (Russian) **82a:42014**
 Pulatov, A. K. The uniform convergence and localization of the means of arithmetical Fourier-Laplace series. (Russian) **82i:42015**
 Singh, A. P. See Tripathi, L. M., **82g:42012**
 Singh, Vijendra Pal See Kaul, B. N., **82j:42015**
 Stepanec, O. I. Asymptotically exact estimates of the deviations of partial Fourier sums on classes of continuous periodic functions of several variables. **(82d:42015)**
 Trigub, R. M. Absolute convergence of Fourier integrals, summability of Fourier series and approximation by polynomials of functions on a torus. (Russian) **82d:42011**
 Tripathi, L. M. (with Singh, A. P.) A study of double Fourier series by Nörlund summability. **82g:42012**
 Waterman, Daniel See Goffman, Casper, **82d:42010**
 Zaderer, P. V. Estimate of the exact upper bound of Fourier coefficients of a function of two variables of class H_{ω}^2 . (Russian) **82g:42013**

secondary classifications:

- Arhipov, G. I. (with Karacuba, A. A.; Čubarikov, V. N.) Uniform estimates of multiple trigonometric sums. (Russian) **(82g:10055)**
 Baiborodov, S. P. On the approximation of functions of several variables by rectangular de la Vallée Poussin sums. (Russian) **(82i:42002)**
 Čubarikov, V. N. See Arhipov, G. I.; et al., **(82g:10055)**
 Goffman, Casper (with Liu, Feng Ché; Waterman, Daniel) A remark on the spaces $V_{\ell, \omega}^r$. **(82i:26004)**
 Hlawka, Edmund Anwendung einer zahlentheoretischen Methode von C. L. Siegel auf Probleme der Analysis. **(82f:10039)**
 Karacuba, A. A. See Arhipov, G. I.; et al., **(82g:10055)**
 Karande, B. K. (with Patil, K. R.) Expansion formulas for Srivastava polynomials in series of the Konhauser biorthogonal polynomials. **(82i:33016)**
 Krepkogorskii, V. L. Interpolation in L_p -spaces with mixed norm. (Russian) **(82g:46064)**
 Liu, Feng Ché See Goffman, Casper; et al., **(82i:26004)**
 Mason, J. C. Near-best multivariate approximation by Fourier series, Chebyshev series and Chebyshev interpolation. **(82a:41031)**
 Patil, K. R. See Karande, B. K., **(82i:33016)**
 Singh, Vikramaditya (with Sinha, S. R.) On the Borel summability of the double Fourier series. **(82c:40010)**
 Sinha, S. R. See Singh, Vikramaditya, **(82c:40010)**

- Vagabov, A. I. Uniform convergence of multiple Fourier series in the principal functions of differential operators. (Russian. Azerbaijani and English summaries) (82c:35087)
- Waterman, Daniel. See Goffman, Casper; et al., (82c:26004)
- Zerikide, T. S. Uniform convergence of Fourier series. (Russian) (82a:42011)
- Zielinski, A. P. On curvilinear distributions expressed by double Fourier series. (German summary) (82m:73067a)
- Errata: "On curvilinear distributions expressed by double Fourier series". (82m:73067b)

42B10 Fourier and Fourier-Stieltjes transforms and other transforms of Fourier type

- Dym, Harry (with Gohberg, Israel) Addendum: "On an extension problem, generalized Fourier analysis, and an entropy formula" [Integral Equations Operator Theory 3 (1980), no. 2, 143-215; MR 81g:42018]. 82c:42014
- Glicksberg, Irving Two remarks on Fourier-Stieltjes transforms. 82d:42012
- Gohberg, Israel. See Dym, Harry, 82c:42014
- Lu, Shan Zhen (C, 1) summability of multiple conjugate Fourier integrals. 82b:42022
- Samaris, Nicolas Some remarks on the $L^p(\mathbb{R}^n)$ spaces. (Italian summary) 82b:42010
- Sharples, Robert Counterexamples for classical operators on Lorentz-Zygmund spaces. 82c:42015

secondary classifications:

- Chen, Kuang Ho (with Yang, Chung Chun) On n -dimensional sampling theorems. (82c:94013)
- Okikiolu, George Olatokunbo ★Special integral operators. Vol. I. (82d:44002)
- Prakash, M. See Shlomo, S., (82d:81041)
- Shlomo, S. (with Prakash, M.) Phase space distribution of an N -dimensional harmonic oscillator. (82d:81041)
- Strichartz, Robert S. Bounded mean oscillation and Sobolev spaces. (82f:46040)
- Yang, Chung Chun. See Chen, Kuang Ho, (82c:94013)
- Zamansky, Marc Approximation et analyse harmonique. (English summary) (82b:41041)

42B15 Multipliers

- Brodskii, A. L. Smooth multipliers of the Fourier-Bessel transformation. (Russian) 82c:42023
- De-Michele, Leonede (with Inglis, Ian R.) Sharp estimates for translation-invariant operators mapping H^1 to L^p . 82b:42011
- Inglis, Ian R. See De-Michele, Leonede, 82b:42011
- Kenig, Carlos E. (with Tomas, Peter A.) Maximal operators defined by Fourier multipliers. 82c:42016
- Kokilavili, V. M. On multiple Hilbert transforms and multipliers in weighted spaces. (Russian. Georgian and English summaries) 82b:42012
- Sato, Shuichi A note on a Fourier multiplier of two variables. 82c:42016
- Sjögren, Peter (with Sjölin, Per) Littlewood-Paley decompositions and Fourier multipliers with singularities on certain sets. (French summary) 82g:42014
- Sjölin, Per Convolution with oscillating kernels on H^p spaces. 82b:42024
- See also Sjögren, Peter, 82g:42014
- Tomas, Peter A. See Kenig, Carlos E., 82c:42016

secondary classifications:

- Mauceri, Giancarlo Weyl multipliers and bounded operators on L^p . (Italian summary) (82g:43008)
- The Weyl transform and bounded operators on $L^p(\mathbb{R}^n)$. (82c:44002)
- Okikiolu, George Olatokunbo ★Special integral operators. Vol. I. (82d:44002)
- Poonima, S. Multiplicateurs des espaces de Sobolev. (English summary) (82c:46047)
- Triebel, Hans Complex interpolation and Fourier multipliers for the spaces $B_{p,q}^s$ and $F_{p,q}^s$ of Besov-Hardy-Sobolev type: the case $0 < p \leq \infty$, $0 < q \leq \infty$. (82j:42016)

42B20 Singular integrals (Calderón-Zygmund, etc.)

- Asirov, R. A. One-dimensional singular integral with a parameter. (Russian) 82b:42013
- Berger, Joel Intégrales singulières dans les espaces d'Orlicz. 82g:42015
- Calderón, A.-P. Commutators, singular integrals on Lipschitz curves and applications. 82f:42016
- Coifman, R. R. (with Meyer, Yves) Une généralisation du théorème de Calderón sur l'intégrale de Cauchy. 82a:42015
- Falconer, K. J. On the convergence of certain singular integrals. 82b:42016
- Gadziev, A. D. Differential properties of the symbol of a multidimensional singular integral operator. (Russian) 82i:42017
- Gadziev, N. M. Nontangential convergence of singular integrals and theorems of D. K. Faddeev's type. (Russian. Azerbaijani and English summaries) 82b:42014
- Harboure de Aguilera, Eleonor Nonstandard truncations of singular integrals. 82d:42013
- Meyer, Yves Les nouvelles intégrales singulières de Calderón. 82c:42017
- See also Coifman, R. R., 82a:42015
- Rode, L. O. Simple multidimensional singular integrals in classes $H_{\omega,\beta}^k$. (Russian) 82g:42016
- Širokov, N. A. Estimates in $L^p(\mathbb{C})$ of certain singular integral operators. (Russian. Armenian and English summaries) 82f:42017
- Sun, Ji Guang Regularization of singular integral equations on a complex hypersphere. (Chinese) 82c:42017
- Tomić, Miloš The saturation problem for angular approximation by singular integrals. (Russian) 82g:42017
- Wahes Cuadrado, Magdalena Note on the Marcinkiewicz integral. (Spanish) 82a:42016

secondary classifications:

- Andersen, Kenneth F. (with John, Russel T.) Weighted inequalities for vector-valued

maximal functions and singular integrals. (82b:42015)

- Asirov, R. A. (with Saliev, V. V.) A double singular integral with continuous density. (Russian) (82c:30061)
- Burbea, Jacob The Bergman projection on weighted norm spaces. (82b:30061)
- Chanillo, Sagun Hypersingular integrals and parabolic potentials. (82c:46050)
- John, Russel T. See Andersen, Kenneth F., (82b:42015)
- Lu, Shan Zhen (C, 1) summability of multiple conjugate Fourier integrals. (82b:42022)
- Saliev, V. V. See Asirov, R. A., (82c:30061)
- Sjölin, Per Two inequalities for pseudodifferential operators. (Russian summary) (82d:35109)

42B25 Maximal functions, Littlewood-Paley theory

- Andersen, Kenneth F. (with John, Russel T.) Weighted inequalities for vector-valued maximal functions and singular integrals. 82b:42015
- Bennett, Colin (with Sharpley, Robert) On an inequality for the sharp function. 82c:42017
- Chang, Sun Yung A. A generalized area integral estimate and applications. 82d:42014
- Fava, N. A. (with Gatto, E. A.; Gutiérrez, C.) On the strong maximal function and Zygmund's class $L(\log^+ L)^*$. 82b:42016
- Gatto, E. A. See Fava, N. A.; et al., 82b:42016
- Gutiérrez, C. See Fava, N. A.; et al., 82b:42016
- John, Russel T. See Andersen, Kenneth F., 82b:42015
- Kokilavili, V. M. Weighted inequalities for maximal functions with respect to regular Vitali families. (Russian. Georgian and English summaries) 82d:42015
- Marshall, Bernard Tempered nontangential boundedness. 82c:42018
- Peral Alonso, Irene Results on certain maximal operators by the method of rotation. (Spanish) 82c:42018
- Sharples, Robert. See Bennett, Colin, 82c:42017
- Torchinsky, Alberto Weighted norm inequalities for the Littlewood-Paley function g_λ^* . 82b:42017
- Varopoulos, Nicholas Th. Aspects of probabilistic Littlewood-Paley theory. 82d:42016
- Wainger, Stephen Applications of Fourier transforms to averages over lower-dimensional sets. 82g:42018
- Zerikide, T. S. On the integrability of Hardy-Littlewood maximal functions. (Russian. Georgian and English summaries) 82d:42017

secondary classifications:

- Bagby, Richard J. Strengthened maximal functions and pointwise convergence in \mathbb{R}^n . (82j:44008)
- Bennett, Colin (with DeVore, Ronald A.; Sharpley, Robert) Weak- L^p and BMO. (82c:46047)
- Bonami, Aline (with Lohoué, Noël) À propos du théorème de Fatou sur certains domaines faiblement pseudo-convexes. (82j:32017)
- Debiard, Amédée Espaces H^p au dessus de l'espace hermitien hyperbolique de \mathbb{C}^n ($n > 1$). II. (English summary) (82m:43016)
- DeVore, Ronald A. See Bennett, Colin; et al., (82c:46047)
- Gaudry, Garth I. Spectral Littlewood-Paley decompositions. (82f:43004)
- Gaveau, Bernard Valeurs frontières des fonctions harmoniques et holomorphes. Cas de la boule de \mathbb{C}^n . (English summary) (82j:32016)
- Valeurs au bord des fonctions harmoniques ou holomorphes et de leurs dérivées. I. (English summary) (82c:32007)
- Gundy, Richard F. On a theorem of F. and M. Riesz and an equation of A. Wald. (82c:60106)
- Johnson, David L. (with Lahr, Charles D.) Multipliers of L^1 -algebras with order convolution. (82c:43004)
- Kenig, Carlos E. (with Tomas, Peter A.) Maximal operators defined by Fourier multipliers. (82c:42016)
- Lahr, Charles D. See Johnson, David L., (82c:43004)
- Lohoué, Noël. See Bonami, Aline, (82j:32017)
- Meyer, Paul-André Retour sur la théorie de Littlewood-Paley. (82m:60050)
- Nagel, Alexander (with Stein, Elias M.; Wainger, Stephen) Boundary behavior of functions holomorphic in domains of finite type. (82k:32027)
- Sharples, Robert. See Bennett, Colin; et al., (82c:46047)
- Širokov, N. A. Estimates in $L^p(\mathbb{C})$ of certain singular integral operators. (Russian. Armenian and English summaries) (82f:42017)
- Sjögren, Peter (with Sjölin, Per) Littlewood-Paley decompositions and Fourier multipliers with singularities on certain sets. (French summary) (82g:42014)
- Sjölin, Per. See Sjögren, Peter, (82g:42014)
- Stein, Elias M. See Nagel, Alexander; et al., (82k:32027)
- Stredulinsky, E. W. Higher integrability from reverse Hölder inequalities. (82m:26024)
- Tomas, Peter A. See Kenig, Carlos E., (82c:42016)
- Triebel, Hans ★Spaces of Besov-Hardy-Sobolev type. (82g:46071)
- Maximal inequalities, Fourier multipliers, Littlewood-Paley theorems, and approximations by entire analytic functions in weighted spaces. (Russian summary) (82g:46067)
- Wainger, Stephen. See Nagel, Alexander; et al., (82k:32027)

42B30 H^p -spaces

- Bernard, Alain Le dual de H^1 n'est pas BMO. 82c:42019
- García-Cuerva, José Weighted H^p spaces. 82a:42018
- Rjabogin, A. K. Integral inequalities for periodic conjugate harmonic functions of several variables in half-space. (Russian) 82m:42014
- Sjölin, Per Convolution with oscillating kernels. 82d:42018
- Triebel, Hans Complex interpolation and Fourier multipliers for the spaces $B_{p,q}^s$ and $F_{p,q}^s$ of Besov-Hardy-Sobolev type: the case $0 < p \leq \infty$, $0 < q \leq \infty$. 82j:42016

secondary classifications:

- Alexander, H. On a minimum principle in several complex variables. (82g:32004) (Bernardsson, Bo) See Skoda, Henri, (82i:32018)
- Bru, B. (with Heinrich, H.; Looijer, Jean-Claude) Autour de la dualité (H^1 , BMO). (82m:60048)
- Carleson, Lennart An explicit unconditional basis in H^1 . (French summary) (82b:46028)
- Chang, Sun Yung A. (with Fefferman, Robert) A continuous version of duality of H^1 with BMO on the bidisc. (82a:32009)
- Chao, J. A. Triadic and dyadic conjugate martingales. (82d:60091)
- Coifman, R. R. (with Rochberg, R. H.; Taibleson, Mitchell H.; Weiss, Guido) Introduction. (82g:32010)
- Dahlberg, Björn E. J. Weighted norm inequalities for the Lusin area integral and the nontangential maximal functions for functions harmonic in a Lipschitz domain. (82f:31003)
- Emery, M. Le théorème de Garnett-Jones, d'après Varopoulos. (82m:60049)
- Fefferman, Robert See Chang, Sun Yung A., (82a:32009)
- Gatto, Angel B. E. An atomic decomposition of distributions in parabolic H^p spaces. (82c:46053)
- Gundy, Richard F. Inégalités pour martingales à un et deux indices: l'espace H^p . (82g:60059)
- Heinrich, H. See Bru, B.; et al., (82m:60048)
- Jones, Peter W. Estimates for the corona problem. (82i:30051)
- Krantz, Steven G. Holomorphic functions of bounded mean oscillation and mapping properties of the Szegő projection. (82i:32010)
- Long, Rui Lin Sur l'espace H_p de martingales régulières ($0 < p \leq 1$). (English summary) (82f:60097)
- Looijer, Jean-Claude See Bru, B.; et al., (82m:60048)
- Némethy, J. Note on imbedding theorems. (82m:46033)
- Rochberg, R. H. See Coifman, R. R.; et al., (82g:32010)
- Skoda, Henri Diviseurs d'aire bornée dans la boule de C^2 : réflexions sur un article de Bo Berndtsson. (82i:32018)
- Švarcman, P. A. An extension theorem for a class of spaces defined by local approximations. (Russian) (82d:46057)
- Taibleson, Mitchell H. See Coifman, R. R.; et al., (82g:32010)
- Torchinsky, Alberto Weighted norm inequalities for the Littlewood-Paley function g_λ^* . (82h:42017)
- Varopoulos, Nicholas Th. A probabilistic proof of the Garnett-Jones theorem on BMO. (82f:60181)
- Weiss, Guido See Coifman, R. R.; et al., (82g:32010)
- Wheden, Richard L. On the dual of weighted $H^1(|z| < 1)$. (82a:46030)
- Younis, Rahman M. Extension results in the Hardy space associated with a logmodular algebra. (82a:46052)
- Representation theorems for Hardy spaces See Coifman, R. R.; et al., (82g:32010)

42B99 None of the above, but in this section

- Frisk, George V. See Oppenheim, Alan V.; et al., 82b:42018
- Gulisašvili, A. B. Behavior of the Fourier transform in function spaces. (Russian) (82c:42020)
- Martinez, David R. See Oppenheim, Alan V.; et al., 82b:42018
- Oppenheim, Alan V. (with Frisk, George V.; Martinez, David R.) Computation of the Hankel transform using projections. 82b:42018
- Suleimanov, S. P. Almost periodic functions of several variables with respect to Hausdorff metrics and some of their properties. (Russian. Azerbaijani and English summaries) 82c:42019
- Temljakov, V. N. Approximation of periodic functions of several variables with a bounded mixed difference. (Russian) 82h:42025

secondary classifications:

- Arambepola, B. Fast computation of multidimensional discrete Fourier transforms. (82g:94018)
- Berenstein, Carlos Alberto (with Taylor, B. A.) Interpolation problems in C^n with applications to harmonic analysis. (82h:32002)
- Hulanicki, Andrzej (with Ricci, F.) A Tauberian theorem and tangential convergence for bounded harmonic functions on balls in C^n . (82c:32008)
- Johnson, Raymond Weighted estimates for fractional powers of partial differential operators. (82j:46040)
- Jones, Peter W. Factorization of A_p weights. (82b:46035)
- Laird, P. G. A reconsideration of the "three squares" problem. (82b:39007)
- Ricci, F. See Hulanicki, Andrzej, (82c:32008)
- Sakai, Ryōzi Approximation of certain classes of periodic functions with many variables. (82h:42001)
- Taylor, B. A. See Berenstein, Carlos Alberto, (82h:32002)

42Cxx Nontrigonometric Fourier analysis

42C05 Orthogonal functions and polynomials, general theory [See also 33A65.]

- Abdulgamidov, A. R. Properties of coefficients of orthogonal series. (Russian) 82d:42019
- Askey, Richard A. (with Ismail, Mourad E. H.) The Rogers q -ultraspherical polynomials. 82h:42026
- Cagarešvili, V. Š. On the Fourier coefficients of a function with finite variation. (Russian. Georgian and English summaries) 82c:42018
- Čarabčjan, A. A. A relationship between the products of orthogonal polynomials. (Russian) 82d:42020
- Cibulitis, A. B. (with Engelis, G. K.) Orthogonal polynomials connected with a fourth-order differential equation. (Russian) 82g:42019

- Engelis, G. K. See Cibulitis, A. B., 82g:42019
- Gavrea, I. "K" orthogonal polynomials. I. (Romanian. English summary) 82h:42027
- Geronimo, Jeffrey S. Matrix orthogonal polynomials on the unit circle. 82k:42013
- Gulichev, N. V. Approximation to continuous functions by Walsh-Fourier sums. (Russian summary) 82c:42021
- Hayashi, H. See Prasad, Jagdish, 82c:42023
- Ismail, Mourad E. H. See Askey, Richard A., 82h:42026
- Korlovskii, N. Ja. Orthogonal trigonometric polynomials with the weight $p(x) = [\frac{1}{2}(1 + \cos x)]^a$. (Russian. English summary) 82a:42019
- Krall, Allan M. Chebyshev sets of polynomials which satisfy an ordinary differential equation. 82a:42020
- Lo Cascio, Maria Laura (with Pasquini, Lionello) Construction of a system of orthonormal functions, of one or more variables, with zeros in a prescribed set. (Italian. English summary) 82c:42020
- Maki, Daniel P. On determining regular behavior from the recurrence formula for orthogonal polynomials. 82h:42028
- Mamukjan, V. M. The Carleman singularity for a class of functions. (Russian. Armenian summary) 82m:42015
- Móricz, F. On the square and the spherical partial sums of multiple orthogonal series. 82j:42017
- Myslovskii, I. P. The numerical characteristics of orthogonal polynomials. (Russian) 82d:42021
- Neval, Paul G. Convergence and summability of orthogonal series. 82c:42022
- Pandey, G. S. On convergence factors of Fourier series in ultraspherical functions on a sphere. (Russian) 82a:42021
- Pasquini, Lionello See Lo Cascio, Maria Laura, 82c:42020
- Prasad, Jagdish (with Hayashi, H.) Representation of continuous and differentiable functions by Fourier series of Jacobi polynomials. 82c:42023
- Rahmanov, E. A. On V. A. Steklov's problem in the theory of orthogonal polynomials. (Russian) 82h:42029a
- Estimates of the growth of orthogonal polynomials whose weight is bounded away from zero. (Russian) 82h:42029b
- Suetin, S. P. The Montessus de Bore theorem for rational approximations of orthogonal expansions. (Russian) 82g:42020
- Tandori, Károly Convergence of series of functions. (Hungarian) 82d:42022
- Über die Größenordnung der Lebesgueschen Funktionen. 82h:42030
- Ullmann, Joseph L. On orthogonal polynomials associated with the infinite interval. 82c:42024

secondary classifications:

- Arioka, Shigekatsu See Ogawa, Shirō; et al., (82j:33019)
- Bareladze, T. P. B. S. Kašin's inequality. (Russian. Georgian and English summaries) (82c:26017)
- de Branges, Louis (with Trutt, David) Orthogonal Newton polynomials. (82j:33018)
- Brezinski, Claude ★Padé-type approximation and general orthogonal polynomials. (82a:41017)
- Case, K. M. See Geronimo, Jeffrey S., (82c:81138)
- Farkov, Ju. A. Asymptotic properties of generalized basis functions of Faber-Erohin. (Russian) (82c:30052)
- Gallone, S. Neutron transport half-range orthogonal polynomial sets and related quadrature sums and properties. (Italian and Russian summaries) (82h:82050)
- Geronimo, Jeffrey S. (with Case, K. M.) Scattering theory and polynomials orthogonal on the real line. (82c:81138)
- Kida, Sōsaburō See Ogawa, Shirō; et al., (82j:33019)
- Krall, Allan M. Orthogonal polynomials satisfying fourth order differential equations. (82d:33021)
- Maroni, Pascal Une généralisation du théorème de Favard-Shohat sur les polynômes orthogonaux. (English summary) [A generalisation of the Favard-Shohat theorem on orthogonal polynomials] (82i:33017)
- Ogawa, Shirō (with Kida, Sōsaburō; Arioka, Shigekatsu) An extension of Christoffel-Darboux' identity and its application. (82j:33019)
- Osolkov, K. I. The upper bound of the norms of orthogonal projections onto subspaces of polynomials. (82c:41013)
- Patil, K. R. (with Thakare, N. K.) Operational formulas and generating functions in the unified form for the classical orthogonal polynomials. (82c:33020)
- Popov, G. Ja. Biorthogonal expansions in problems of mechanics. (82f:73043)
- Thakare, N. K. See Patil, K. R., (82c:33020)
- Trutt, David See de Branges, Louis, (82j:33018)
- Wilcox, Calvin H. Theory of Bloch waves. (82b:82068)
- Zas'ko, Ju. N. Generalized Chebyshev polynomials. (Russian. English summary) (82c:33018)

42C10 Fourier series in special orthogonal functions (Legendre polynomials, Walsh functions, etc.)

- Agrawal, S. R. (with Patel, C. M.) On the mean convergence of a Fourier-Bessel series. 82g:42021
- (with Patel, C. M.) On convergence and Riesz means of a series of Bessel functions. 82i:42019
- Bhatt, Shri Nivas On $|L|$ summability of Laplace series. 82b:42020
- Bojanic, R. (with Vuilleumier, M.) On the rate of convergence of Fourier-Legendre series of functions of bounded variation. 82j:42018
- Čanturija, Z. A. On the absolute convergence of the series of Fourier-Haar coefficients. 82m:42016
- Džafarov, Arif S. Fourier-Legendre coefficients. (Russian. Azerbaijani and English summaries) 82f:42018
- Gasper, George (with Trebels, Walter) Multiplier criteria of Hörmander type for Jacobi expansions. 82h:42019
- Gogoleva, I. M. (with Lokot', V. V.) Projection operators with minimal norms with

- respect to the Walsh system in the space L_1 . (Russian) **82d:42023**
- Hsiä, Nai Hung On absolute convergence of Fourier series. **82i:42021**
- Jód, István Almost everywhere divergent Fourier series with respect to arbitrary bounded orthonormal system of the form $\{\varphi(n_k x)\}$. **82m:42017**
- Kipiani, T. G. The approximation order of functions of several variables by the Fourier-Jacobi sums. (Russian. English and Georgian summaries) **82f:42019**
- Kraczkowski, Andrzej An application of double moduli of variation to double Fourier-Haar series. **82k:42014**
- Lašćenov, V. K. Approximation of differentiable functions by partial sums of a Fourier-Laguerre series. (Russian) **82i:42020**
- Lokot', V. V. See Gogoleva, I. M., **82d:42023**
- Lorch, Lee The Lebesgue constants for Borel summation of Laplace series. **82h:42031**
- Mačaravšič, N. D. Linear methods of summability of Fourier series by generalized spherical functions. (Russian. Georgian and English summaries) **82m:42018**
- Móricz, F. Lebesgue functions and multiple function series. I. **82h:42032**
- On Walsh series with coefficients tending monotonically to zero. **82m:42019**
- Ōhashi, Katsuhiko Central limit theorems for lacunary Walsh series and an application. **82i:42015**
- Osilenker, B. P. Weighted estimates for the majorant for linear means of Fourier series in orthogonal polynomials. (Russian) **82d:42024**
- Pak, I. N. Series in Bessel functions. (Russian) **82k:42033**
- Patel, C. M. See Agrawal, S. R., **82g:42021** and **82i:42019**
- Povčun, L. P. Fourier-Laguerre series and Lagrange interpolation polynomials. (Russian) **82e:42021**
- Powell, Charles H. (with Wade, William R.) Term by term dyadic differentiation. **82d:42025**
- Runst, Thomas (with Sickel, Winfried) On strong summability of Jacobi-Fourier-expansions and smoothness properties of functions. **82k:42016**
- Šer, A. P. Some properties of systems of linearly distorted Walsh functions. (Russian) **82h:42034**
- Sickel, Winfried See Runst, Thomas, **82k:42016**
- Skvorcov, V. A. An example of a series with respect to a Walsh system. (Russian) **82d:42026**
- An example of a double Haar series. (Russian) **82h:42035**
- On Fourier series with respect to the Walsh-Kaczmarz system. (Russian summary) **82k:42017**
- Some estimates of approximation of functions by Cesàro means of Fourier-Walsh series. (Russian) **82i:42022**
- Tomescu, F. M. G. (with Tomescu, I. B. L.) Local evaluations and errors of Haar series expansions. (French and German summaries) **82k:42018**
- Tomescu, I. B. L. See Tomescu, F. M. G., **82k:42018**
- Trebel, Walter See Gasper, George, **82h:42019**
- Vuilleumier, M. See Bojanić, R., **82j:42018**
- Wade, William R. See Powell, Charles H., **82d:42025**
- Zheng, Wei Xing The generalized Walsh transform and an extremum problem. (Chinese. English summary) **82m:42020**
- secondary classifications:
- Bressoud, David M. On partitions, orthogonal polynomials and the expansion of certain infinite products. **(82e:05021)**
- Grysa, Krzysztof (with Jankowski, Janusz) On summation of certain Dini series. (Polish summary) **(82i:33008)**
- Jankowski, Janusz See Grysa, Krzysztof, **(82i:33008)**
- Logunova, O. M. Analytic continuation of the sum of Laplace series. (Russian) **(82b:31007)**
- Mamažanov, B. Unconditional convergence of orthogonal series with structural conditions on $(-\infty, -1] \cup [1, \infty)$. (Russian) **(82a:42010)**
- Maravić, Manojlo ★Summability of the expansion in eigenfunctions of the Laplace operator in n -dimensional space. (Serbo-Croatian) **(82i:35136)**
- Mertens, H. J. (with Nessel, Rolf J.) An equivalence theorem concerning multipliers of strong convergence. **(82i:41041a)**
- (with Nessel, Rolf J.) Quasikonvexe Multiplikatoren starker Konvergenz. (Russian summary) **(82i:41041b)**
- Mishra, K. K. (with Sharma, Krishna Gopal) On strong summability of ultraspherical series. **(82h:33013)**
- Motornyi, V. P. Approximation in the mean of functions by Fourier-Legendre sums. (Russian) **(82m:42004)**
- Nessel, Rolf J. See Mertens, H. J., **(82i:41041a)** and **(82i:41041b)**
- Pandei, G. S. On convergence factors of Fourier series in ultraspherical functions on a sphere. (Russian) **(82a:42021)**
- Patel, C. M. See Puri, V. K., **(82i:42003)**
- Prasad, Sankatha See Prasad, Y. N., **(82g:33013)**
- Prasad, Y. N. (with Prasad, Sankatha) Fourier series for Buschman's H -function of two variables. (Hindi. English summary) **(82g:33013)**
- Puri, V. K. (with Patel, C. M.) On the degree of approximation of partial sums of Fourier-Bessel series. **(82i:42003)**
- Schipp, Ferenc Fast Fourier transform and conditional expectation. **(82a:42008)**
- Sharma, Krishna Gopal See Mishra, K. K., **(82h:33013)**
- Srivastava, Hari M. Certain dual series equations involving Jacobi polynomials. (Italian summary) **(82j:45009)**
- Yadav, Sarjoo Prasad On the absolute convergence of Jacobi series at end points. **(82j:33021)**
- 42C15 Series of general orthogonal functions, generalized Fourier expansions, nonorthogonal expansions
- Colzani, Leonardo Existence of sets of uniqueness of L^p for general orthonormal systems. **82i:42023**
- Móricz, F. On the growth order of the rectangular partial sums of multiple nonorthogonal series. (Russian summary) **82g:42022**
- Osilenker, B. P. Weight estimates of majorants of Cesàro means of Fourier series of L^p -valued vector functions. (Russian) **82k:42036**
- Oswald, Peter Über die Konvergenz von Orthogonalreihen in $\varphi(L)$. [On the convergence of orthogonal series in $\varphi(L)$] **82k:42019**
- Poleschuk, S. N. Exact Weyl multipliers. (Russian) **82e:42022**
- Rempulska, Lucyna On the (A, p) -summability of orthonormal series. **82e:42023**
- Schwinn, Hans Über die Konvergenz und Summierbarkeit von Teilfolgen allgemeiner Orthogonalreihen. **82f:42021**
- Über die starke Summierbarkeit von Orthogonalreihen durch Euler-Verfahren. (Russian summary) [On the strong summability of orthogonal series by Euler methods] **82k:42020**
- Shiba, Masaaki Marcinkiewicz-Zygmund theorem for multiorthonormal series. **82d:42027**
- Szarek, Stanisław Biorthogonal systems in function spaces. (Polish) **82h:42020**
- Tandori, Károly Über die Summierbarkeit der Orthogonalreihen. **82k:42021**
- secondary classifications:
- Agrawal, S. R. (with Patel, C. M.) On the mean convergence of a Fourier-Bessel series. **(82g:42021)**
- Cagarešvili, V. Š. On the Fourier coefficients of a function with finite variation. (Russian. Georgian and English summaries) **(82i:42018)**
- Endl, Kurt Beitrag zur Theorie der starken Summierbarkeit mit einer Anwendung auf Orthogonalreihen. **(82g:40009)**
- Ketonen, Timo On unconditionality in L_p spaces. **(82h:46020)**
- Kratz, W. (with Trautner, Rolf) Zur Konvergenz von Funktionenreihen. **(82d:40002)**
- Leindler, László On the strong summability and approximation of orthogonal series. **(82i:40005)**
- Móricz, F. A note on the central limit theorem for orthogonal series. **(82e:60041)**
- Okuyama, Yasuo (with Tsuchikura, Tamotsu) On the absolute Riesz summability of orthogonal series. (Russian summary) **(82k:42008)**
- Patel, C. M. See Agrawal, S. R., **(82g:42021)**
- Raina, R. K. See Srivastava, Hari M., **(82h:33012)**
- Srivastava, Hari M. (with Raina, R. K.) New generating functions for certain polynomial systems associated with the H -functions. **(82h:33012)**
- Trautner, Rolf See Kratz, W., **(82d:40002)**
- Tsuchikura, Tamotsu See Okuyama, Yasuo, **(82k:42008)**
- 42C20 Rearrangements and other transformations of Fourier and other orthogonal series
- 42C25 Uniqueness and localization for orthogonal series
- Gevorkjan, G. G. Uniqueness sets for complete orthonormal systems and Fourier integrals. (Russian. Armenian summary) **82k:42022**
- Skvorcov, V. A. On the uniqueness theorem for double Haar series with convergent spherical partial sums. (Russian. English summary) **82m:42021**
- secondary classifications:
- Colzani, Leonardo Existence of sets of uniqueness of L^p for general orthonormal systems. **(82i:42023)**
- 42C30 Completeness of sets of functions
- Tumarkin, A. G. Completeness of certain systems of functions. (Russian) **82a:42022**
- secondary classifications:
- Vol'berg, A. L. The completeness of the rational fractions in weighted L^p -spaces on the circle. (Russian) **(82i:30005)**
- 42C99 None of the above, but in this section
- Kašin, B. S. On properties of random matrices related to almost everywhere unconditional convergence. (Russian) **82d:42028**
- secondary classifications:
- Bourgain, Jean On trigonometric series in super reflexive spaces. **(82i:46022)**
- Szarek, Stanisław Bases and biorthogonal systems in the spaces C and L^1 . **(82m:46018)**
- 43-XX ABSTRACT HARMONIC ANALYSIS (For other analysis on topological and Lie groups, see 22Exx.)
- 43-01 Elementary exposition, textbooks
- Dreseler, Bernd See Schempp, Walter, **82m:43001**
- Schempp, Walter (with Dreseler, Bernd) ★Einführung in die harmonische Analyse. (German) [Introduction to harmonic analysis] **82m:43001**
- secondary classifications:
- (Boll, Ludwig) See Dieudonné, Jean A., **(82c:00002)**
- Dieudonné, Jean A. ★Grundzüge der modernen Analysis. Band 5/6. (German) [Elements of modern analysis. Vol. 5/6] **(82c:00002)**

43-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

(Ebner, Leo) See Hua, Luo Geng, (82c:32032)

(Graev, M. I.) See Hua, Luo Geng, (82c:32032)

Hua, Luo Geng ★ Harmonic analysis of functions of several complex variables in the classical domains. (82c:32032)

(Korányi, Adam) See Hua, Luo Geng, (82c:32032)

43-03 Historical (must also be assigned at least one classification number from Section 01)

43-04 Explicit machine computation and programs (not the theory of computation or programming)

43-06 Proceedings, conferences, etc.

Analyse harmonique ★ Analyse harmonique. (French) [Harmonic analysis] 82k:43001

Harmonic analysis ★ Analyse harmonique. (French) [Harmonic analysis] 82k:43001

Harmonic analysis in homogeneous spaces ★ Harmonic analysis in homogeneous spaces. (Japanese) 82g:43001

Seminar:

Harmonic Analysis ★ Séminaire d'Analyse Harmonique (1979-1980). (French)

[Seminar on Harmonic Analysis (1979-1980)] 82d:43001

Symposium:

Harmonic Analysis in Homogeneous Spaces ★ Harmonic analysis in homogeneous spaces. (Japanese) 82g:43001

secondary classifications:

(Carmona, Jacques) See Noncommutative harmonic analysis and Lie groups, (82m:22001)

(Vergne, Michèle) See Noncommutative harmonic analysis and Lie groups, (82m:22001)

Colloquium:

Noncommutative Harmonic Analysis ★ Noncommutative harmonic analysis and Lie groups. (82m:22001)

Marseille ★ Noncommutative harmonic analysis and Lie groups. (82m:22001)

Noncommutative harmonic analysis and Lie groups ★ Noncommutative harmonic analysis and Lie groups. (82m:22001)

43A05 Measures on groups, semigroups, etc.

Pigno, Louis (with Saeki, Sadahiro) Constructions of singular measures with remarkable convolution properties. 82h:43001

Saeki, Sadahiro See Pigno, Louis, 82h:43001

Sarapa, N. A note on the cosine equation for probability measures on compact semigroups. (Serbo-Croatian summary) 82f:43001

Sato, Enji A note on some singular measures. 82c:43001

Siebert, Eberhard Supports of holomorphic convolution semigroups and densities of symmetric convolution semigroups on a locally compact group. 82j:43001

secondary classifications:

Armstrong, Thomas E. Borel measures on compact groups are meager. (82k:28013)

Dupuis, Christian Quasiméasures de type positif. (English summary) (82j:43004)

Fel'dman, G. M. (with Fryntov, A. E.) On the decomposition of a convolution of two Poisson distributions on locally compact abelian groups. (Russian. English summary) (82m:60012)

Fryntov, A. E. See Fel'dman, G. M., (82m:60012)

Hulanicki, Andrzej (with Ryll-Nardzewski, Czesław) Invariant extensions of the Haar measure. (82c:28023)

Janssen, Arnold Integration separat stetiger Funktionen. (English summary) (82g:28020)
Some remarks on P. Lévy's theorem for a net of discrete measures and the purity law on locally compact semigroups. (82m:60007)

Kinzl, Franz Convolutions of probability measures on semigroups. (82c:22007)

Leonte, Aristide Kakutani's metric and continuity of convolution. (82g:60018)

Maksimov, V. M. Mathematical expectations for probability distributions on compact groups. (82g:60020)

McCrudden, Michael On embedding infinitely divisible distributions on simply-connected solvable Lie groups. (82m:60013)

Factors and roots of large measures on connected Lie groups. (82m:60014)

Ryll-Nardzewski, Czesław See Hulanicki, Andrzej, (82c:28023)

Siebert, Eberhard Diffuse and discrete measures semigroups of probability measures on topological groups. (French summary) (82m:60015)

Vol'kovič, V. E. Normed rings generated by generalized convolutions. (Russian) (82c:60025)

Vrem, Richard C. Continuous measures and lacunarity on hypergroups. (82m:43013)

Woess, Wolfgang Aperiodische Wahrscheinlichkeitsmaße auf topologischen Gruppen. (English summary) (82h:60008)

43A07 Means on groups, semigroups, etc.

Anker, J.-Ph. Sur la propriété P_* . (English summary) 82f:43002

Bożejko, Marek Uniformly amenable discrete groups. 82h:43001

Dubins, Lester E. (with Margolies, David) Naturally integrable functions. 82f:43003

Junghenn, H. D. Topological left amenability of semidirect products. 82g:43002

Losert, Viktor (with Rindler, Harald) Almost invariant sets. 82i:43001

Margolies, David See Dubins, Lester E., 82f:43003

Milnes, Paul Amenable groups for which every topologically left invariant mean is right invariant. 82i:43002

Mycielski, Jan Finitely additive invariant measures. I. 82g:43003a

Of'sanskii, A. Ju. On the question of the existence of an invariant mean on a group. (Russian) 82h:43002

Rindler, Harald See Losert, Viktor, 82i:43001

Rosenblatt, J. M. Finitely additive invariant measures. II. 82g:43003b

Seda, Anthony Karel On measures in fibre spaces. 82m:43002

Talangrand, Michel Moyennes invariantes s'annulant sur des idéaux. 82h:43003

Touré, Saliou Espaces homogènes moyennables et représentations des produits semi-directs. 82h:43004

Wong, James C. S. A characterisation of locally compact amenable subsemigroups. 82h:43005

secondary classifications:

Ahmad, Z. U. (with Saraswat, S. K.; Mursaleen) Invariant means and multiplicative matrices. (Turkish summary) (82i:40004)

Bondar, James V. (with Milnes, Paul) Amenability: a survey for statistical applications of Hunt-Stein and related conditions on groups. (82h:62015)

Johnson, David L. Translation-invariant linear forms on $D(G)$. (82f:22002)

Margulis, G. A. Some remarks on invariant means. (82h:28034)

Milnes, Paul See Bondar, James V., (82h:62015)

Mursaleen See Ahmad, Z. U.; et al., (82i:40004)

Saraswat, S. K. See Ahmad, Z. U.; et al., (82i:40004)

Schott, René Croissance et moyennabilité des espaces homogènes. (English summary) [Growth and amenability of homogeneous spaces] (82m:22011)

43A10 Measure algebras on groups, semigroups, etc.

Graham, Colin C. See Parreau, François; et al., 82h:43002

Host, Bernard (with Parreau, François) Sur les mesures dont la transformée de Fourier-Stieltjes ne tend pas vers 0 à l'infini. 82a:43001

See also Parreau, François; et al., 82h:43002

Hulanicki, Andrzej A class of convolution semigroups of measures on a Lie group. 82g:43004

Karanikas, C. G. A class of translation-invariant characters of $M(G)$. 82c:43002Parreau, François (with Host, Bernard; Graham, Colin C.) The interior of the Šilov boundary of $M(G)$ is trivial. 82h:43002

See also Host, Bernard, 82a:43001

Wood, G. V. Measures with bounded powers on locally compact abelian groups. 82m:43003

43A15 L^p -spaces and other function spaces on groups, semigroups, etc.

Bloom, Walter R. Factorisation of Lipschitz functions on zero-dimensional groups. 82j:43002

Busby, Robert C. (with Smith, Harvey A.) Product-convolution operators and mixed-norm spaces. 82i:43003

Chen, Ing Sheun See Lai, Han Ch'ing, 82k:43002

Glicksberg, Irving Reflexive invariant subspaces of $L^p(G)$ are finite dimensional. 82c:43001Lai, Han Ch'ing (with Chen, Ing Sheun) Harmonic analysis on the Fourier algebras $A_{1,p}(G)$. 82k:43002Lohoue, Noël Estimations L^p des coefficients de représentation et opérateurs de convolution. 82m:43004

Losert, Viktor A characterization of the minimal strongly character invariant Segal algebra. 82i:43004

(with Rindler, Harald) Cyclic vectors for $L^p(G)$. 82h:43006

Rindler, Harald See Losert, Viktor, 82h:43006

Russo, Bernard The norm of the L^p -Fourier transform. III. Compact extensions. 82a:43002

Smith, Harvey A. See Busby, Robert C., 82i:43003

Taibleson, Mitchell H. Majorization of functions in $H^1(K^*)$, K a local field. (Russian summary) 82m:43005

Yamaguchi, Hiroshi On certain function spaces and group structures. 82h:43003

secondary classifications:

Bertrandias, J.-P. (with Dupuis, Christian) Transformation de Fourier sur les espaces $l^p(L^p)$. (English summary) (82a:43006)

Dupuis, Christian See Bertrandias, J.-P., (82a:43006)

Fakhoury, H. Sur la factorisation de certains multiplicateurs. (82c:43002)

Henrichs, Rolf Wim On one-sided harmonic analysis. (82c:43003)

McKennon, Kelly (with Richardson, Gary D.) Convergence of certain probability distribution functions. (82h:46029)

Pisier, Gilles De nouvelles caractérisations des ensembles de Sidon. (English summary) [Some new characterizations of Sidon sets] (82m:43011)

Richardson, Gary D. See McKennon, Kelly, (82h:46029)

43A17 Analysis on ordered groups, H^p -theory

secondary classifications:

Goodrich, Robert K. (with Gustafson, Karl E.) Weighted trigonometric approximation and inner-outer functions on higher-dimensional Euclidean spaces. (82m:42003)

Gustafson, Karl E. See Goodrich, Robert K., (82m:42003)

43A20 L^1 -algebras on groups, semigroups, etc.

Esterle, Jean Le théorème taubérien de Wiener et l'équation de la chaleur. 82d:43002

Grosser, Michael $L^1(G)$ as an ideal in its second dual space. 82i:43005

Ho, Ch'ing Jen Approximate identities in normed algebras. 82g:43005a

- Characterizations of Segal algebras. **82g:43005b**
 Approximate identities in $D_0(S(G))$. **82g:43005c**
 Leptin, H. Über die schwache Wiener'sche Eigenschaft für Liesche Gruppen. **82a:43003**
 Racher, Gerhard On the continuity of convolution in $L^p(G)$. (Italian summary) **82j:43006**
 Rubio de Francia, José L. Notes on spectral sets and factorization of ideals. (Spanish) **82m:43006**
 Steijpen, Gerard L. G. The dual of the space of measures with continuous translations. **82b:43007**
 Weit, Yitzhak On the one-sided Wiener's theorem for the motion group. **82g:43007a**
 On closed ideals in the motion group algebra. **82g:43007b**
 Spectral analysis in spaces of vector valued functions. **82m:43007**

secondary classifications:

- Badé, W. G. (with Dales, H. G.) Norms and ideals in radical convolution algebras. **(82k:46002)**
 Barnes, Bruce A. Locally separable Banach \ast -algebras. **(82i:46006)**
 Dales, H. G. See Badé, W. G., **(82k:46002)**
 Dhar, R. K. (with Vasudeva, H. L.) $L^1(I, X)$ with order convolution. **(82j:46070)**
 Dutta, M. See Tewari, U. B.; et al., **(82c:43003)**
 Hartmann, Klaus Pedersen ideal and group algebras. **(82k:46009)**
 Hulanicki, Andrzej Invariant subsets of nonsynthesis Leptin algebras and nonsymmetry. **(82i:22009)**
 Kugler, Werner On the symmetry of generalized L^1 -algebras. **(82f:46074)**
 Sitaram, Alladi An analogue of the Wiener-Tauberian theorem for spherical transforms on semisimple Lie groups. **(82c:43008)**
 Taschner, Rudolf J. Eine Ungleichung von van der Corput und Kemperman. (English summary) **(82i:10070)**
 Tewari, U. B. (with Dutta, M.; Vaidya, D. P.) Multipliers of group algebras of vector-valued functions. **(82c:43003)**
 Vaidya, D. P. See Tewari, U. B.; et al., **(82c:43003)**
 Vasudeva, H. L. See Dhar, R. K., **(82j:46070)**

43A22 Homomorphisms and multipliers of function spaces on groups, semigroups, etc.

- Bloom, Walter R. Multipliers of Lipschitz spaces on zero-dimensional groups. **82j:43003**
 Cecchini, Carlo Operators on $VN(G)$ commuting with $A(G)$. **82k:43003**
 Dutta, M. See Tewari, U. B.; et al., **(82c:43003)**
 Fakhoury, H. Sur la factorisation de certains multiplicateurs. **82c:43002**
 Gaudry, Garth I. Spectral Littlewood-Paley decompositions. **82f:43004**
 (Griffin, J.) See McKennon, Kelly, **82b:43008**
 Johnson, David L. (with Lahr, Charles D.) Multipliers of L^1 -algebras with order convolution. **82k:43004**
 Lahr, Charles D. See Johnson, David L., **82k:43004**
 Luong, N. C. (with Szász, Árpád) Remarks on a functional calculus based on Fourier series. **82a:43004**
 Mauceri, Giancarlo Weyl multipliers and bounded operators on L^p . (Italian summary) **82g:43008**
 McKennon, Kelly Letter to the editors: "Multipliers of the ring L^1_r ." [Vestnik Leningrad. Univ. Mat. Meh. Astronom. 1976, vyp. 1, 21-22; MR 55 #984] by McKennon and J. Griffin. (Russian) **82k:43006**
 Quek, T. S. (with Yap, Leonard Y. H.) Multipliers from $L_1(G)$ to a Lipschitz-Zygmund class. **82b:43006**
 Szász, Árpád Discrete Fourier analysis for quotient multipliers. **82a:43005**
 See also Luong, N. C., **82a:43004**
 Tewari, U. B. (with Dutta, M.; Vaidya, D. P.) Multipliers of group algebras of vector-valued functions. **82c:43003**
 Vaidya, D. P. See Tewari, U. B.; et al., **82c:43003**
 Weit, Yitzhak On spectral analysis in locally compact groups. **82b:43009**
 Yap, Leonard Y. H. See Quek, T. S., **82b:43006**

secondary classifications:

- Grosser, Michael (with Losert, Viktor; Rindler, Harald) "Double multipliers" und asymptotisch invariante approximierende Einheiten. **(82d:46069)**
 Losert, Viktor See Grosser, Michael; et al., **(82d:46069)**
 Mauceri, Giancarlo Zonal multipliers on the Heisenberg group. **(82k:43008)**
 Rindler, Harald See Grosser, Michael; et al., **(82d:46069)**

43A25 Fourier and Fourier-Stieltjes transforms on locally compact abelian groups

- Andersson, Roger Power bounded restrictions of Fourier-Stieltjes transforms. **82d:43003a**
 See also Svensson, Erik, **82d:43003b**
 Bertrandias, J.-P. (with Dupuis, Christian) Transformation de Fourier sur les espaces $l^p(L^p)$. (English summary) **82a:43006**
 Dupuis, Christian See Bertrandias, J.-P., **82a:43006**
 Luukkainen, John R. (with Misllove, Michael W.) Fourier-Stieltjes algebras of compact extensions of nilpotent groups. **82m:43008**
 MacLean, H. Alan Transforms of measures on quotients and spline functions. **82c:43004**
 Misllove, Michael W. See Luukkainen, John R., **82m:43008**
 Svensson, Erik A note on: "Power bounded restrictions of Fourier-Stieltjes transforms" [Math. Scand. 46 (1980), no. 1, 129-153] by R. Andersson. **82d:43003b**

secondary classifications:

- Kahane, Jean-Pierre (with Katznelson, Yitzhak) Homéomorphismes du cercle et séries de Fourier absolument convergentes. (English summary) **(82g:42005a)**
 Katznelson, Yitzhak See Kahane, Jean-Pierre, **(82g:42005a)**

- Olevskii, A. M. Change of variable and absolute convergence of the Fourier series. (Russian) **(82g:42005b)**
 Pigno, Louis (with Saeki, Sadahiro) Constructions of singular measures with remarkable convolution properties. **(82k:43001)**
 Small sets in the support of a Fourier-Stieltjes transform. **(82k:43006)**
 Pisier, Gilles Conditions d'entropie assurant la continuité de certains processus et applications à l'analyse harmonique. **(82j:60067)**
 Saeki, Sadahiro See Pigno, Louis, **(82k:43001)**
 Suh, Sungwoo The space of real parts of algebras of Fourier transforms. **(82j:46068)**

43A30 Fourier and Fourier-Stieltjes transforms on nonabelian groups and on semigroups, etc.

secondary classifications:

- Chao, Wen Min Fourier inversion and Plancherel formula of Lie groups of real type $(A_1)^n$. **(82h:22009)**
 Gadjiev, V. G. On an inversion formula for a Fourier transform of functions of an infinite number of variables. (Russian. English summary) **(82f:60019)**
 Giulini, Saverio UC-sets in the dual object of compact groups. **(82f:43007)**
 Lucjuk, A. V. An analogue of the Paley-Wiener theorem for the groups $U(n, 1)$, $SO_0(n, 1)$. (Russian) **(82f:22009)**
 Siebert, Eberhard Fourier analysis and limit theorems for convolution semigroups on a locally compact group. **(82b:60023)**

43A32 Other transforms and operators of Fourier type

- Dupuis, Christian Quasimésures de type positif. (English summary) **82j:43004**

secondary classifications:

- Moynihan, Richard Conjugate transforms and limit theorems for τ_f semigroups. **(82e:60027)**

43A35 Positive definite functions on groups, semigroups, etc.

- Fischer, David R. Functions positive-definite on \mathbb{R}^2 and the Heisenberg group. **82m:43009**
 Henrichs, Rolf Wim On one-sided harmonic analysis. **82c:43003**
 Kahane, Jean-Pierre Sur les fonctions de type positif et de type négatif. **82b:43010**

secondary classifications:

- Hirsch, Francis Quotients de fonctions définies-négatives et synthèse spectrale. **(82f:43005)**
 Milnes, Paul On extending characters. **(82k:43005)**

43A40 Character groups and dual objects

- Bloom, Walter R. (with Sussich, Joseph F.) Positive linear operators and the approximation of continuous functions on locally compact abelian groups. **82c:43004**
 Hauenschild, Wilfried Subhypergroups and normal subgroups. **82b:43004**
 McKennon, Kelly See Novak, David, **82j:43005**
 Milnes, Paul On extending characters. **82k:43005**
 Novak, David (with McKennon, Kelly) Exponentials on locally compact abelian groups. **82j:43005**
 Sussich, Joseph F. See Bloom, Walter R., **82c:43004**

secondary classifications:

- Green, Philip Square-integrable representations and the dual topology. **(82g:22005)**
 McKennon, Kelly The complexification and differential structure of a locally compact group. **(82k:22007)**

43A45 Spectral synthesis on groups, semigroups, etc.

- Crombez, G. Ideals in $L_1(G)$ and almost periodic functions. **82g:43009**
 Hirsch, Francis Quotients de fonctions définies-négatives et synthèse spectrale. **82f:43005**
 Kirsch, W. (with Müller, David E.) On the synthesis problem for orbits of Lie groups in \mathbb{R}^n . **82f:43006**
 Kumar, Ajay (with Singh, Ajit Iqbal) Spectral synthesis in products and quotients of hypergroups. **82k:43005**
 Muller, David E. See Kirsch, W., **82f:43006**
 Osipov, V. F. The pasting together of ideals of smooth functions in $A(\mathbb{R}^2)$. (Russian. English summary) **82d:43004**
 Singh, Ajit Iqbal See Kumar, Ajay, **82k:43005**
 Stegeman, J. D. Some problems on spectral synthesis. **82a:43007**
 Weit, Yitzhak On spectral analysis in locally compact motion groups. **82e:43005**

secondary classifications:

- Benedetto, John J. The theory of constructive signal analysis. **(82m:94022)**
 Hulanicki, Andrzej Invariant subsets of nonsynthesis Leptin algebras and nonsymmetry. **(82i:22009)**
 Romo, John G. Spectral synthesis in Banach modules. I. **(82g:46118)**
 Rubio de Francia, José L. Notes on spectral sets and factorization of ideals. (Spanish) **(82m:43006)**
 Weit, Yitzhak On closed ideals in the motion group algebra. **(82g:43007b)**

- 43A46 Special sets (thin sets, Kronecker sets, Helson sets, Ditkin sets, Sidon sets, etc.)
- Blei, Ron C. Fractional Cartesian products in harmonic analysis. **82m:43010**
 Corrigendum and addendum to the paper: "A simple Diophantine condition in harmonic analysis" [Studia Math. **52** (1974/75), 195–202; MR **57** #10368]. **82g:43010**
- Cartwright, Donald I. (with Howlett, Robert B.; McMullen, John R.) Extreme values for the Sidon constant. **82c:43005**
- Giulini, Saverio UC-sets in the dual object of compact groups. **82f:43007**
- Graham, Colin C. (with Ramsey, L. Thomas) Sidon sets with extremal Sidon constants. **82j:43006**
- Howlett, Robert B. See Cartwright, Donald I.; et al., **82c:43005**
- Hutchinson, M. F. Local Λ sets for profinite groups. **82c:43006**
- Laurent, Michel Exemples d'ensembles de multiplicité. (English summary) **82c:43007**
- Lippman, G. E. (with Wade, William R.) Pseudofunctions and uniqueness on the group of integers of a p -series field. **82b:43011**
- McMullen, John R. See Cartwright, Donald I.; et al., **82c:43005**
- Pigno, Louis Small sets in the support of a Fourier-Stieltjes transform. **82b:43006**
- Pisier, Gilles De nouvelles caractérisations des ensembles de Sidon. (English summary) [Some new characterizations of Sidon sets] **82m:43011**
- Ramsey, L. Thomas A theorem of C. Ryll-Nardzewski and metrizable l.c.a. groups. **82a:43008**
 See also Graham, Colin C., **82j:43006**
- Saeki, Sadahiro Singular measures and tensor algebras. **82b:43006**
- Shapiro, George S. Balayage by Fourier transforms with sparse frequencies in compact abelian groups. **82m:43012**
- Vrem, Richard C. Continuous measures and lacunarity on hypergroups. **82m:43013**
- Wade, William R. See Lippman, G. E., **82b:43011**
- Yamaguchi, Hiroshi On the product of a Riesz set and a small p set. **82f:43008**
- secondary classifications:
- Orlov, E. V. Lacunary trigonometric series and complementability in L^p . (Russian) **(82h:42019)**
- Stegeman, J. D. Some problems on spectral synthesis. **(82a:43007)**
- 43A50 Convergence of Fourier series and of inverse transforms
- Travaglini, Giancarlo Dirichlet kernels and failure of localization principle for compact groups. (Italian summary) **82m:43014**
- 43A55 Summability methods on groups, semigroups, etc. [See also 40J05.]
- Dreseler, Bernd Estimates from below for Lebesgue constants of Fourier series on compact Lie groups. **82a:43009**
- 43A60 Almost periodic functions on groups and semigroups and their generalizations (recurrent functions, distal functions, etc.); almost automorphic functions
- Crombez, G. Almost periodicity in groups and compactness of operators. **82d:43005**
- Dzinyi, Heneri A. M. Weakly almost periodic functions and the irregularity of multiplication in semigroup algebras. **82d:43006a**
- Compactness criteria for semigroups, a note on a preceding paper. **82d:43006b**
- Friedberg, Michael Almost-periodic functions, compactifications, and faces of finite-dimensional cones. **82b:43007**
- Lasser, Rupert Almost periodic functions on hypergroups. **82d:43007**
- Milnes, Paul On vector-valued weakly almost periodic functions. **82b:43007**
- Semadeni, Zbigniew Some Saks-space dualities in harmonic analysis on commutative semigroups. **82b:43007**
- Troallic, Jean-Pierre Une approche nouvelle de la presque-périodicité faible. **82f:43009**
- secondary classifications:
- Cenușă, Gheorghe (with Săciu, Ion) Sequences of random variables almost periodical in probability. (French and Russian summaries) **(82b:60057)**
 (with Săciu, Ion) On some stochastic approximations for random functions. (French summary) **(82b:60058)**
- Junghenn, H. D. (with Lerner, B. T.) Semigroup compactifications of semidirect products. **(82k:22003)**
- Lerner, B. T. See Junghenn, H. D., **(82k:22003)**
- Muni, Giuseppe Functions of \otimes almost periodic with respect to a homeomorphic group. (Italian. English summary) **(82a:54073)**
- Rothman, Sheldon The von Neumann kernel and minimally almost periodic groups. **(82g:22008)**
- Săciu, Ion See Cenușă, Gheorghe, **(82b:60057)** and **(82b:60058)**
- 43A65 Representations of groups, semigroups, etc. [See also 22Dxx.]
- Bożejko, Marek Some aspects of harmonic analysis on free groups. **82c:43006**
- secondary classifications:
- Cartwright, Donald I. (with Howlett, Robert B.; McMullen, John R.) Extreme values for the Sidon constant. **(82c:43005)**
- Harish-Chandra A submergence principle and its applications. **(82e:22032)**
- Howlett, Robert B. See Cartwright, Donald I.; et al., **(82c:43005)**
- Ishioji, Kiyoshi (with Mitoma, Itaru; Okazaki, Yoshiaki) The Eberlein theorem on noncommutative locally compact groups. **(82e:22014a)**
 (with Okazaki, Yoshiaki) Pontryagin duality for nonabelian locally compact groups. **(82e:22014b)**
- Kono, Yasuko Multiplicity formulas for discrete series of spin $(1, 2m)$ and $SU(1, n)$. **(82m:22015)**
- Losert, Viktor (with Rindler, Harald) Cyclic vectors for $L^p(G)$. **(82b:43006)**
- McMullen, John R. See Cartwright, Donald I.; et al., **(82c:43005)**
- Mitoma, Itaru See Ishioji, Kiyoshi; et al., **(82e:22014a)**
- Okazaki, Yoshiaki See Ishioji, Kiyoshi; et al., **(82e:22014a)** and **(82e:22014b)**
- Picardello, Massimo A. Locally compact unimodular groups with atomic duals. (Italian summary) **(82e:22015)**
- Rao, M. M. Convolutions of vector fields. I. **(82b:22006)**
- Rindler, Harald See Losert, Viktor, **(82b:43006)**
- Saworotnow, Parfeny P. Stationary processes on a semigroup. **(82a:60050)**
- 43A70 Analysis on specific locally compact abelian groups [See also 12A85.]
- secondary classifications:
- Quek, T. S. (with Yap, Leonard Y. H.) Multipliers from $L_c(G)$ to a Lipschitz-Zygmund class. **(82i:43006)**
- Talbot, Mitchell H. Majorization of functions in $H^1(K^*)$, K a local field. (Russian summary) **(82m:43005)**
- Yap, Leonard Y. H. See Quek, T. S., **(82i:43006)**
- 43A75 Analysis on specific compact groups
- secondary classifications:
- Eguchi, Masaaki (with Kumahara, Keisaku; Muta, Yōichi) A subspace of Schwartz space on motion groups. **(82a:22010)**
- Giulini, Saverio (with Travaglini, Giancarlo) L^p -estimates for matrix coefficients of irreducible representations of compact groups. **(82b:22024)**
- Kumahara, Keisaku See Eguchi, Masaaki; et al., **(82a:22010)**
- Muta, Yōichi See Eguchi, Masaaki; et al., **(82a:22010)**
- Samuel, Stuart $U(N)$ integrals, $1/N$, and the De Wit-'t Hooft anomalies. **(82c:81116)**
- Schempp, Walter Periodic splines and nilpotent harmonic analysis. **(82d:41014)**
- Travaglini, Giancarlo See Giulini, Saverio, **(82b:22024)**
- 43A77 Analysis on general compact groups
- 43A80 Analysis on other specific Lie groups [See also 22E30.]
- Herz, Carl Invariant distributions. **82c:43008**
- Hulanicki, Andrzej A Tauberian property of the convolution semigroup generated by $X^2 - |Y|^2$ on the Heisenberg group. **82b:43012**
- Kawazoe, Takeshi An analogue of Paley-Wiener theorem on $SU(2, 2)$. **82c:43007**
- Mauceri, Giancarlo Zonal multipliers on the Heisenberg group. **82b:43008**
- Poguntke, Detlev Symmetry and nonsymmetry for a class of exponential Lie groups. **82b:43013**
- Sitarum, Aliadi An analogue of the Wiener-Tauberian theorem for spherical transforms on semisimple Lie groups. **82c:43008**
- secondary classifications:
- Campoli, Oscar A. Paley-Wiener type theorems for rank-1 semisimple Lie groups. **(82j:22013)**
- Chao, Wen Min Fourier inversion and Plancherel formula for $Sp(n, \mathbb{R})$. **(82j:22014)**
- Cygan, Jacek Subadditivity of homogeneous norms on certain nilpotent Lie groups. **(82b:22009)**
- Eguchi, Masaaki (with Kumahara, Keisaku) Riemann-Lebesgue lemma for real reductive groups. **(82c:22012)**
- Fischer, David R. Functions positive-definite on \mathbb{R}^3 and the Heisenberg group. **(82m:43009)**
- Goodman, Roe (with Wallach, Nolan R.) Whittaker vectors and conical vectors. **(82j:22018)**
- Holman, Wayne J., III Generalized Bessel functions and the representation theory of $U(2) \otimes C^{2 \times 2}$. **(82a:22015)**
- Kumahara, Keisaku See Eguchi, Masaaki, **(82c:22012)**
- Lipsman, Ronald L. Orbit theory and harmonic analysis on Lie groups with co-compact nilradical. **(82b:22026)**
- Malliavin, Paul C^∞ parametrix on Lie groups and two steps factorization on convolution algebras. **(82b:22019)**
- Mamiya, Masaichi An analogue of the theorem of Paley-Wiener type on the universal covering group of de Sitter group. **(82d:22011)**
- Nomura, Takaaki Harmonic analysis on the universal covering group of certain semidirect product Lie group. **(82j:22015)**
- Saka, Kōichi Besov spaces and Sobolev spaces on a nilpotent Lie group. **(82a:46035)**
- Wallach, Nolan R. See Goodman, Roe, **(82j:22018)**
- Zelobenko, D. P. Harmonic analysis on reductive Lie groups. (Russian) **(82e:22001)**
- 43A85 Analysis on homogeneous spaces
- Debiard, Amédée (with Gaveau, Bernard) Une formule de Green locale pour certains espaces symétriques de rang > 1 . (English summary) **82m:43015**
 Espaces H^p au dessus de l'espace hermitien hyperbolique de C^n ($n > 1$). II. (English summary) **82m:43016**
- Eberlein, Patrick A trace formula. **82c:43009**
- Faraud, J. Distributions sphériques sur les espaces hyperboliques. **82b:43009**
- Gaveau, Bernard See Debiard, Amédée, **82m:43015**
- Gelfand, I. M. (with Gindikin, S. G.; Graev, M. I.) Integral geometry in affine and projective spaces. (Russian) **82m:43017**

- Glinik, S. G. See Gelfand, I. M.; et al., 82n:43017
- Graev, M. I. See Gelfand, I. M.; et al., 82n:43017
- Guillemin, Victor A Szegő-type theorem for symmetric spaces. 82c:43010
Some microlocal aspects of analysis on compact symmetric spaces. 82c:43011
- Koornwinder, Tom H. ★Invariant differential operators on nonreductive homogeneous spaces. 82g:43011
- Korányi, Adam (with Putz, Robert B.) An area theorem for products of symmetric spaces of rank one. (French summary) 82g:43012
- Kučment, P. A. Representations of solutions of invariant differential equations on some symmetric spaces. (Russian) 82c:43008
- Lax, Peter D. (with Phillips, Ralph S.) Translation representations for the solution of the non-Euclidean wave equation. II. 82f:43010
- Phillips, Ralph S. See Lax, Peter D., 82f:43010
- Putz, Robert B. See Korányi, Adam, 82g:43012
- Sano, Shigeru The Plancherel formula for $SL(2, \mathbb{C})/SL(2, \mathbb{R})$. 82h:43008
- Strömberg, Jan-Olov Weak type L^1 estimates for maximal functions on noncompact symmetric spaces. 82h:43010
- Volobuev, I. P. Plane waves on the sphere and some of their applications. (Russian. English summary) 82c:43012

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- Agranovskii, M. L. A problem of integral geometry in connection with image processing. (Russian) (82g:53076)
- Cahen, Michel (with Gutt, Simone) Produits-★ sur un espace riemannien symétrique. (English summary) (82a:58024)
- Chang, Weita Global solvability of the Laplacians on pseudo-Riemannian symmetric spaces. (82h:58105)
- Coifman, R. R. (with Rochberg, R. H.; Taibleson, Mitchell H.; Weiss, Guido) Introduction. (82g:32010)
- Dieudonné, Jean A. Special functions and linear representations of Lie groups. (82c:22030)
- Duflo, Michel Opérateurs différentiels invariants sur un espace symétrique. (English summary) (82c:58104)
- Duistermaat, J. J. (with Kolk, J. A. C.; Varadarajan, V. S.) Spectra of compact locally symmetric manifolds of negative curvature. (82a:58050a)
(with Kolk, J. A. C.; Varadarajan, V. S.) Erratum: "Spectra of compact locally symmetric manifolds of negative curvature". (82a:58050b)
- Flensted-Jensen, Mogens K -finite joint eigenfunctions of $U(\mathfrak{g})^K$ on a non-Riemannian semisimple symmetric space G/H . (See 82m:22001)
- Gutt, Simone See Cahen, Michel, (82a:58024)
- Helgason, Sigurdur Support of Radon transforms. (82h:53068)
- Ivanov, V. A. A problem on inequalities for norms of differential operators in homogeneous spaces. (Russian) (82c:49026)
- Jørgensen, Palle E. T. Partial differential operators and discrete subgroups of a Lie group. (82h:22025)
- Klesova, L. M. See Vilenkin, N. Ja., (82c:33008)
- Kolk, J. A. C. See Duistermaat, J. J.; et al., (82a:58050a) and (82a:58050b)
- Kušner, G. F. F. I. Karpelevič's compactification is homeomorphic to a sphere. (Russian) (82h:53069)
- Ōshima, Toshio Fourier analysis on semisimple symmetric spaces. (See 82m:22001)
- Richardson, Leonard F. Poisson summation on Kirillov orbits. (82h:22018)
- Rochberg, R. H. See Coifman, R. R.; et al., (82g:32010)
- Scott, David Selberg-type zeta functions for the group of complex two by two matrices of determinant one. (82c:10050)
- Sekiguchi, Jirō Eigenspaces of the Laplace-Beltrami operator on a hyperboloid. (82g:22010)
- Stanton, Robert J. (with Weinstein, Alan D.) On the L^4 norm of spherical harmonics. (82d:58015)
- Taibleson, Mitchell H. See Coifman, R. R.; et al., (82g:32010)
- Varadarajan, V. S. See Duistermaat, J. J.; et al., (82a:58050a) and (82a:58050b)
- Vilenkin, N. Ja. (with Klesova, L. M.) The continuum parts of the bases on the hyperboloid $\{x, x\} = -1$. (82c:33008)
- Weinstein, Alan D. See Stanton, Robert J., (82d:58015)
- Weiss, Guido See Coifman, R. R.; et al., (82g:32010)
- Widom, Harold Asymptotics of compressions to spectral subspaces of the Laplacian. (82c:58101)
- Representation theorems for Hardy spaces See Coifman, R. R.; et al., (82g:32010)

43A90 Spherical functions [See also 22E45, 22E46.]

- Agranovskii, M. L. Invariant algebras of functions on homogeneous spaces of noncompact semisimple Lie groups. (Russian) 82c:43013
- Clerc, Jean-Louis Estimations à l'infini des fonctions des Bessel généralisées. (English summary) 82c:43014
- Dadok, Jiri Solvability of invariant differential operators of principal type on certain Lie groups and symmetric spaces. 82b:43014
- Greiner, Peter C. Spherical harmonics on the Heisenberg group. 82c:43009
- Muta, Yôichi On the spherical functions with one-dimensional K -types and the Paley-Wiener type theorem on some simple Lie groups. 82i:43009
- Strichartz, Robert S. Errata: "Fourier transforms and noncompact rotation groups" [Indiana Univ. Math. J. 24 (1974/75), 499-526; MR 52 #1178]. 82c:43015

secondary classifications:

- Dubovik, O. A. (with Sidonskii, O. B.) A group of matrices and Legendre kernels. (Russian) (82j:22010)
- Flensted-Jensen, Mogens On a fundamental series of representations related to an affine symmetric space. (82c:22031)
 K -finite joint eigenfunctions of $U(\mathfrak{g})^K$ on a non-Riemannian semisimple symmetric space G/H . (See 82m:22001)

- Sano, Shigeru The Plancherel formula for $SL(2, \mathbb{C})/SL(2, \mathbb{R})$. (82h:43008)
- Sidonskii, O. B. See Dubovik, O. A., (82j:22010)

43A95 Categorical methods [See also 18-XX, 46Mxx.]

secondary classifications:

- Boseck, Helmut (with Rudolph, Klaus-Peter) An axiomatic approach to differentiability on topological groups. (82h:22001)
- Rudolph, Klaus-Peter See Boseck, Helmut, (82h:22001)

43A99 Miscellaneous topics

- Bellay, J.-M. Bochner's theorem and the existence of invariant set functions. 82c:43016
- Lax, Peter D. (with Phillips, Ralph S.) Correction to: "Translation representations for the solution of the non-Euclidean wave equation" [Comm. Pure Appl. Math. 32 (1979), no. 5, 617-667; MR 81a:43013]. 82a:43010
- Phillips, Ralph S. See Lax, Peter D., 82a:43010

secondary classifications:

- Baldi, P. Caractérisation des groupes de Lie connexes récurrents. [Characterisation of recurrent connected Lie groups] (82k:60019)
- Batalin, I. A. Quasigroup construction and first class constraints. (82k:22016)
- Crépél, Pierre (with Raugi, Albert) Théorème central limite sur les groupes nilpotents. (English summary) (82a:60016)
- De Cannière, Jean (with Enock, Michel; Schwartz, Jean-Marie) Sur deux résultats d'analyse harmonique non-commutative: une application de la théorie des algèbres de Kac. (82h:46090)
- Enock, Michel See De Cannière, Jean; et al., (82h:46090)
- Harrison, D. K. Nonnormal Galois theories and some resulting structures. (82m:13005)
- Landstad, Magnus B. Algebras of spherical functions associated with covariant systems over a compact group. (82i:46102)
- Nouygrat, Paul Sur les points extrémaux de la boule unité de l'espace des coefficients d'une représentation unitaire et sur l'égalité $A_*(G) = B_*(G)$. (82h:22005)
- Ponomarenko, O. I. Representations of moving averages for generalized homogeneous random fields on locally compact abelian groups. (Russian. English summary) (82k:60020)
- Raugi, Albert See Crépél, Pierre, (82a:60016)
- Schwartz, Jean-Marie See De Cannière, Jean; et al., (82h:46090)

44-XX INTEGRAL TRANSFORMS, OPERATIONAL CALCULUS [For fractional derivatives and integrals, see 26A33. For numerical methods, see 65R10.]

44-01 Elementary exposition, textbooks

- Ditkin, V. A. (with Prudnikov, A. P.) ★Calcul opérationnel. (French) [Operational calculus] 82f:44001
- Doetsch, Gustav ★Anleitung zum praktischen Gebrauch der Laplace-Transformation und der Z-Transformation. (German) [Guide to the practical use of the Laplace transformation and the Z-transformation] 82k:44001
(Embarek, Djilali) See Ditkin, V. A.; et al., 82f:44001
- Föllinger, Otto ★Laplace- und Fourier-Transformation. (German) [Laplace and Fourier transformation] 82b:44001
- (Herschel, Rudolf) See Doetsch, Gustav, 82k:44001
- Prudnikov, A. P. See Ditkin, V. A., 82f:44001
- Watson, Eric John ★Laplace transforms and applications. 82m:44001

secondary classifications:

- LePage, Wilbur R. ★Complex variables and the Laplace transform for engineers. (82c:30001)
- Rees, Charles Sparks (with Shah, Swarupchand M.; Stanojević, Časlav V.) ★Theory and applications of Fourier analysis. (82a:42001)
- Shah, Swarupchand M. See Rees, Charles Sparks; et al., (82a:42001)
- Stanojević, Časlav V. See Rees, Charles Sparks; et al., (82a:42001)

44-02 Advanced exposition (research surveys, monographs, etc.)

44-03 Historical (must also be assigned at least one classification number from Section 01)

44-04 Explicit machine computation and programs (not the theory of computation or programming)

44-06 Proceedings, conferences, etc.

44A05 General transforms [See also 42A38.]

- Chorlton, F. General integral transforms. 82f:44002
- Jakovlev, Ju. S. See Slepjan, L. I., 82b:44002
- Popov, G. Ja. On expansion of the possibilities of the integral transformation method in solving problems of mechanics. 82g:44001
- Slepjan, L. I. (with Jakovlev, Ju. S.) Construction of formulas for integral transforms. (Russian) 82b:44002
- Tiwari, A. K. Some results on spaces of type $LH_{a,b}$. 82c:44001

secondary classifications:

- Katz, Myron Bernard ★Questions of uniqueness and resolution in reconstruction from projections. (82g:92013)
 Quinto, Eric Todd Topological restrictions on double fibrations and Radon transforms. (82g:58084)

44A10 Laplace transform

- Chen, Isaac I. H. Application of pseudotrigonometry to Bessel series and integrals of Bessel functions. 82j:44002
 Dahiya, R. S. Computation of integrals involving gamma and error functions. 82c:44001
 Demčenko, A. G. (with Kohnaniv'skii, O. P.) A property of a certain class of Laplace-type transforms. (Russian) 82m:44002
 Eggemont, P. P. B. A note on a paper by Luxemburg concerning the Laplace transform. 82a:44001
 On a generalization of W. A. J. Luxemburg's asymptotic problem concerning the Laplace transform. 82k:44002
 Joshi, J. M. C. (with Upreti, Rita) On the representation of functions as generalized Laplace integrals. 82k:44003
 Kohnaniv'skii, O. P. See Demčenko, A. G., 82m:44002
 Lokšin, A. A. A real Tauberian theorem for the Laplace transform, and its application to the wave operator with retarded time. (Russian. English summary) 82f:44003
 Mäulen, Jürgen Das Wachstumsverhalten ganzer Funktionen unter Voraussetzungen über ihre Laplace-Transformierte. 82d:44001
 Mishra, Ramadhar On certain generalized q -Laplace and Stieltjes transforms. 82h:44001
 More, S. V. Topologies of integral transforms. 82g:44002
 O'Farrell, Anthony G. Five generalisations of the Weierstrass approximation theorem. 82k:44004
 Smyčjaeva, L. G. ★Преобразование Лапласа функций многих переменных. (Russian) [Laplace transform of functions of several variables] 82j:44003
 Sova, Miroslav On the equivalence of Widder-Miyadera's and Leviatan's representability conditions for the Laplace transform of integrable vector-valued functions. (Czech summary) 82h:44002
 On a fundamental theorem of the Laplace transform theory. (Czech summary) 82m:44003
 Stadtmüller, U. (with Trautner, Rolf) Tauberian theorems for Laplace transforms in dimension $D > 1$. 82f:44001
 Takáči, Arpad On the Abelian theorems for the distributional Laplace transformation. (Serbo-Croatian summary) 82j:44001
 Tivari, B. M. L. Real inversion and representation theorem for a generalised Laplace transform. I. 82h:44003
 Trautner, Rolf See Stadtmüller, U., 82f:44001
 Upreti, Rita See Joshi, J. M. C., 82k:44003

secondary classifications:

- Andrade, R. F. S. (with Rauh, A.) The Lorenz model and the method of Carleman embedding. (82g:58049)
 Das, Rabindra Nath A new method for exact solution of transfer equations in finite media. (82j:85006)
 Ditkin, V. A. (with Prudnikov, A. P.) ★Calcul opérationnel. (French) [Operational calculus] (82f:44001)
 Doetsch, Gustav ★Anleitung zum praktischen Gebrauch der Laplace-Transformation und der Z-Transformation. (German) [Guide to the practical use of the Laplace transformation and the Z-transformation] (82k:44001)
 (Embarek, Djilali) See Ditkin, V. A.; et al., (82f:44001)
 Föllinger, Otto ★Laplace- und Fourier-Transformation. (German) [Laplace and Fourier transformation] (82h:44001)
 (Herschel, Rudolf) See Doetsch, Gustav, (82k:44001)
 Le Couteur, K. J. Representation of the function $\text{Tr}(\exp(A - \lambda B))$ as a Laplace transform with positive weight and some matrix inequalities. (82i:82019)
 Lowndes, J. S. On some generalisations of the Riemann-Liouville and Weyl fractional integrals and their applications. (82k:35016)
 Miletić, J. A finite Laplace transform method for the solution of a mixed boundary value problem in the theory of elasticity. (82d:73012)
 de Mottoni, Piero (with Talenti, Giorgio) Stabilization and error bounds for the inverse Laplace transform. (82h:65093)
 Naito, Toshiaki Fundamental matrices of linear autonomous retarded equations with infinite delay. (82f:34084)
 Pilipović, Stevan Convolution and the Laplace transform in L^1 . (Serbo-Croatian. English summary) (82h:44008)
 Postnikov, A. G. Tauberian theory and its applications. (Russian) (82f:40012a)
 Tauberian theory and its applications. (82f:40012b)
 Prudnikov, A. P. See Ditkin, V. A., (82f:44001)
 Rathore, R. K. S. (with Singh, O. P.) Determination of certain asymptotic constants related with the post-Widder inversion of Laplace transform. (82g:41018)
 Rauh, A. See Andrade, R. F. S., (82g:58049)
 Sgibnev, M. S. Banach algebras of functions that have identical asymptotic behavior at infinity. (Russian) (82m:46058)
 Singh, O. P. See Rathore, R. K. S., (82g:41018)
 Talenti, Giorgio See de Mottoni, Piero, (82h:65093)
 Tiwari, A. K. On a distributional generalized Laplace transform. (82g:46081)
 Watson, N. A. Initial singularities of Gauss-Weierstrass integrals and their relations to Laplace transforms and Hausdorff measures. (82b:28029)

44A15 Special transforms (Legendre, Hilbert, etc.)

- Carmichael, Richard D. (with Milton, E. O.) Abelian theorems for the distributional Stieltjes transform. 82a:44002

- (with Hayashi, Elmer K.) Abelian theorems for the Stieltjes transform of functions. II. 82m:44004
 Das, G. L. On the convergence of a generalised Struve-transform. 82g:44003
 Duggal, B. P. On the spectrum of a class of integral transforms. 82h:44003
 Glaeske, Hans-Jürgen Die Laguerre-Pinney-Transformation. 82g:44004
 Hayashi, Elmer K. See Carmichael, Richard D., 82m:44004
 Jones, D. S. The Kontorovich-Lebedev transform. 82c:44002
 Joshi, J. M. C. On Joshi's generalized Stieltjes transform. 82g:44005
 Keilson, Julian (with Nunn, W.; Sumita, U.) The bilateral Laguerre transform. 82h:44004
 Koščavec, P. T. See Procenko, V. S., 82h:44005
 Mauceri, Giancarlo The Weyl transform and bounded operators on $L^p(\mathbb{R}^n)$. 82i:44002
 Mehta, F. C. Generalized sampling expansions of signals for finite Hankel and other transforms. 82m:44005
 Metz, Charles See Tretjak, Oleh, 82a:44004
 Milton, E. O. See Carmichael, Richard D., 82a:44002
 Namias, Victor Fractionalization of Hankel transforms. 82g:44006
 Nunn, W. See Keilson, Julian; et al., 82h:44004
 Okikiola, George Olatunbo ★Special integral operators. Vol. I. 82d:44002
 Pathak, R. S. The reduced Poisson-Hankel transform of generalized functions. 82i:44003
 Procenko, V. S. (with Koščavec, P. T.) Hybrid integral Fourier-Hankel and Hankel-Fourier transforms. (Russian. English summary) 82h:44005
 Pyhtee, G. N. ★Точные методы вычисления интегралов типа Коши. (Russian) [Exact methods for calculating integrals of Cauchy type] 82m:44006
 Rappoport, Ju. M. Integral equations and Parseval equalities for modified integral Kontorovich-Lebedev transforms. (Russian) 82j:44004
 Rockmore, R. Integrals over the Fermi function. 82d:44003
 Rooney, P. G. On the \mathcal{Q} and \mathcal{C}_c transformations. 82b:44004
 On the boundedness and range of the extended Hankel transformation. 82d:44004
 Samadpur, S. N. A Bessel-Watson transform pair. 82a:44003
 Singh, Vishwa Nath A note on a paper of Glasser. 82i:44004
 Sumita, U. See Keilson, Julian; et al., 82h:44004
 Tretjak, Oleh (with Metz, Charles) The exponential Radon transform. 82a:44004
 Tuy, Heang Reconstruction of a three-dimensional object from a limited range of views. 82g:44007

secondary classifications:

- Abdullaeva, G. G. (with Musaev, B. I.) Regularization of a singular integral along an open contour. (Russian) (82j:45005)
 Ahuja, Gopi On Whittaker transform of two variables. (82a:45015)
 Andersen, Kenneth F. Weighted inequalities for the Stieltjes transformation and Hilbert's double series. (82b:26020)
 Berger, Joël Intégrales singulières dans les espaces d'Orlicz. (82g:42015)
 Bhonsle, B. R. (with Prasad, R. D.) Kontorovich-Lebedev transform of a class of generalised functions. (82b:46050)
 Chakrabarti, Aloknath (with Williams, W. E.) A note on a singular integral equation. (82c:45008)
 Chang, Tao (with Herman, Gabor T.) A scientific study of filter selection for a fan-beam convolution reconstruction algorithm. (82g:92012)
 Chen, Isaac I. H. Application of pseudotrigonometry to Bessel series and integrals of Bessel functions. (82j:44002)
 Child, James D. Periodic-type functionals and their extensions. (82i:30038)
 Costabel, Martin An inverse for the Gohberg-Krupnik symbol map. (82a:45025)
 Debnath, Lokenath See Pathak, R. S., (82b:46051)
 Exton, Harold A note on a hypergeometric transformation. (82h:33002)
 A note on a discontinuous hypergeometric integral. (82g:33003)
 Glasser, M. L. A class of Bessel summations. (82j:33015)
 Goulart Rosa, S., Jr. See Grandy, W. T., Jr., (82h:82010)
 Grandy, W. T., Jr. (with Goulart Rosa, S., Jr.) Applications of Mellin transforms to the statistical mechanics of ideal quantum gases. (82h:82010)
 Guillemin, Victor (with Sternberg, Shlomo) Some problems in integral geometry and some related problems in microlocal analysis. (82h:58087)
 Gurov, L. G. Stability of Lorentz transformations in n -dimensional space. (Russian) (82i:53052)
 Heatherly, H. E. A generalized Maclaurin transform for solving difference equations. (82j:65092)
 Helgason, Sigurdur Support of Radon transforms. (82h:53068)
 Herman, Gabor T. See Chang, Tao, (82g:92012)
 Jones, Peter W. Factorization of A_λ weights. (82b:46035)
 Jones, Roger L. An analog of the Marcinkiewicz integral in ergodic theory. (82m:28034)
 Kokilashvili, V. M. On multiple Hilbert transforms and multipliers in weighted spaces. (Russian. Georgian and English summaries) (82b:42012)
 Lal, Sewa Generalised Jacobi transform and heat conduction in a spherical shell. (82c:44031)
 Musaev, B. I. See Abdullaeva, G. G., (82j:45005)
 Nikolaeva, R. V. See Zmorović, V. A., (82d:30016)
 Pathak, R. S. (with Debnath, Lokenath) Expansions of distributions in terms of generalized heat polynomials and their Appell transforms. (82b:46051)
 Prasad, R. D. See Bhonsle, B. R., (82b:46050)
 Schiffer, Menahem M. Fredholm eigenvalues and Grunsky matrices. (82k:30010)
 Šeško, M. A. Inversion of a multidimensional integral of Cauchy type. (Russian. English summary) (82a:45007)
 el-Sirafy, Ibrahim H. Problem of a circular annular elastic plate for which normal stress and tangential displacement are given on the boundary. (82h:73008)
 Soni, K. (with Soni, Raj P.) A note on uniform asymptotic expansions of finite K , and related transforms with explicit remainder. (82a:41029)
 Soni, Raj P. See Soni, K., (82a:41029)
 Srivastava, Rekha Definite integrals associated with the H -function of several variables. (82k:33016)

- Sternberg, Shlomo. See Guillemin, Victor. (82b:5907)
 Williams, W. E. See Chakrabarti, Alok Nath. (82c:45008)
 Zamorov, V. A. (with Nikolaeva, R. V.) Integral transformation with logarithmic kernels in some classes of univalent functions. (Russian) (82d:30016)

44A20 Transforms of special functions

- Gahov, A. S. Laplace-Euler originals with a power singularity of integral type at zero. (Russian) (82b:44005)
 Glaeske, Hans-Jürgen. Some remarks on operational calculi for the Sturm-Liouville operator. (82b:44005)
 Glasser, M. L. Laplace transforms and asymptotic expansions of orthogonal polynomials. (82g:44008)
 Joshi, V. G. (with Saxena, Rajendra K.) Abelian theorems for distributional H -transform. (82m:44007)
 Nasim, C. On K -transform. (82b:44006)
 Saxena, Rajendra K. See Joshi, V. G. (82m:44007)
 Shah, Manilal. An integral transform pair for H -function. (82c:44002)
 Sharma, O. P. On self-reciprocal functions involving infinite series of Meijer's G -functions. (82j:44005)
 Singh, Nam Prasad. A class of integral transforms in two variables. (82j:44006)
 Thapa, G. B. A theorem on a generalised Laplace transform. (82c:44003)

secondary classifications:

- Alshaboury, S. See Simary, M. A., (82b:33006)
 Lauwerier, H. A. ★Mathematical models of epidemics. (82h:92032)
 Mathur, B. L. An integral involving generalized Rice polynomials and a generalized function of N variables. (Spanish) (82k:33010)
 Panton, David M. Mathematical reconstruction techniques in computer axial tomography. (82h:92008)
 Simary, M. A. (with Alshaboury, S.) On G -transforms. (82b:33008)

44A30 Multiple transforms

- Pati, Raj. See Prasad, Y. N., (82b:44007)
 Prasad, Y. N. (with Pati, Raj) Basic properties of modified multidimensional integral transform. (Hindi. English summary) (82b:44007)
 Verma, R. U. A note on self-reciprocal functions in generalised Hankel transform. (82j:44007)

secondary classifications:

- Arya, J. P. See Joshi, C. M., (82h:33010)
 Joshi, C. M. (with Arya, J. P.) Concerning some properties of the H -function of several variables. (82h:33010)
 Šesko, M. A. Inversion of a multidimensional integral of Cauchy type. (Russian. English summary) (82a:45007)

44A35 Convolution

- Bagby, Richard J. Strengthened maximal functions and pointwise convergence in \mathbb{R}^n . (82j:44008)
 Buschman, R. G. An identity for convolution integrals. (82m:44008)
 Gupta, H. L. Some theorems on convolution transform involving Bateman's functions. (Hindi. English summary) (82g:44009)
 Jaju, R. P. See Tivari, B. M. L., (82c:44004)
 Lall, A. B. B. See Verma, T. N., (82c:44006)
 Okikiolu, George Olatokumbo. Representations of integrals and convolutions of radial functions. (82c:44005)
 Weighted inequalities for convolutions and homogeneous convolutions. (82c:44006)
 Weighted form of a general inequality. (82c:44007)
 Pilipović, Stevan. Convolution and the Laplace transform in L' . (Serbo-Croatian. English summary) (82i:44008)
 Tivari, B. M. L. (with Jaju, R. P.) On the inversion operator function of a generalised convolution transform involving Hermite polynomial in its kernel. (82c:44004)
 Verma, T. N. (with Lall, A. B. B.) A convolution formula for the distributional generalized Laguerre transform. (82h:44006)

secondary classifications:

- Aronson, Donald G. Widder's inversion theorem and the initial distribution problems. (82i:35081)
 Artico, G. A. Sturm-Liouville transforms: the finite sine and cosine. (82h:34020)
 Božinov, Nikola S. (with Dimovski, Ivan H.) A representation of the commutant of the initial value Sturm-Liouville operator. (82c:47055)
 (with Dimovski, Ivan H.) A generalization of a Raichinov's representation formula for the commutant of integration operators. (82m:47019)
 Busby, Robert C. (with Smith, Harvey A.) Product-convolution operators and mixed-norm spaces. (82d:43003)
 Dimovski, Ivan H. See Božinov, Nikola S., (82c:47055) and (82m:47019)
 Glaeske, Hans-Jürgen. Die Laguerre-Pinney-Transformation. (82g:44004)
 Laird, P. G. A reconsideration of the "three squares" problem. (82h:39007)
 Luther, Wolfram. Taubersche Restgliedsätze für eine Klasse von Fourierkernen. (82a:40008)
 Muntean, Ioan. Sur l'associativité de la convolution des fonctions presque-périodiques. (Romanian summary) (82g:42009)
 Sjölin, Per. Convolution with oscillating kernels. (82d:42018)
 Smith, Harvey A. See Busby, Robert C., (82d:43003)

44A40 Calculus of Mikusiński and other similar operational calculi

- Bowman, H. See Golberg, M. A., (82b:44007)
 Bučko, Zigmunt. Eine Operatorenmethode zur Lösung von gewöhnlichen linearen Differenzengleichungen. (82f:44004)
 Fényes, T. On the operational solution of a convolution type integral equation of the third kind. (82c:44005)
 Golberg, M. A. (with Bowman, H.) Mikusiński operators without the Titchmarsh theorem. (82b:44007)
 Heynig, Frank. Ein zweidimensionaler Operatoralkül. (82b:44008)
 Steiner, A. Introduction to Mikusiński operator theory for the solution of differential equations with applications. (Spanish. English summary) (82d:44005)

secondary classifications:

- Bittner, Ryszard (with Smentek, Zygfryd) Taylor's formula for many derivatives. Integrals. (82b:47002)
 Ditkin, V. A. (with Prudnikov, A. P.) ★Calcul opérationnel. (French) [Operational calculus] (82f:44001)
 Dudek, Zbigniew. Some properties of Wronskian in D -R spaces of the type QL . II. (82i:47016)
 (Embarek, Djilali) See Ditkin, V. A.; et al., (82f:44001)
 Hayashi, Mitsutoshi. On some Dirichlet series generated by an arithmetic function. (82i:10006)
 Jain, Sudha. See Prabhakar, T. R., (82b:45015)
 Koprinski, S. C. Operators from the Mikusiński field related to the generalized equation of heat conductivity with constant coefficients and polynomial boundary conditions. (Bulgarian. Russian and English summaries) (82c:35009)
 Luong, N. C. (with Szász, Árpád) Remarks on a functional calculus based on Fourier series. (82a:43004)
 Pap, Endre. An application of J. Mikusiński's lemma on convergence. (Serbo-Croatian summary) (82c:46055)
 Prabhakar, T. R. (with Jain, Sudha) Generalized Bessel function and some integral equations. (82b:45015)
 Some singular integral equations involving Laguerre polynomials and finite parts of divergent integrals. (82b:45011)
 Prudnikov, A. P. See Ditkin, V. A., (82f:44001)
 Sadlo, Zbigniew. On Hermite expansion of x^2 . (82a:33013)
 Smentek, Zygfryd. See Bittner, Ryszard, (82b:47002)
 Stanković, B. (with Takači, Đ.) Linear differential equations with coefficients in a field. II. (Serbo-Croatian summary) (82f:35181)
 Szász, Árpád. Inversion in the multiplier extension of admissible vector modules. (82c:46060)
 See also Luong, N. C., (82a:43004)
 Takači, Đ. See Stanković, B., (82f:35181)

44A45 Classical operational calculus

44A55 Discrete operational calculus

- Stanković, Miomir S. Semidiscrete transform. (82d:44006)

secondary classifications:

- Jerri, A. J. The application of general discrete transforms to computing orthogonal series and solving boundary value problems. (82a:41008)

44A60 Moment problems

- Kuz'mina, A. L. The Hamburger moment problem with the condition of absence of mass on given intervals. (Russian) (82a:44006)
 Šaškin, Ju. A. The moment problem in spaces of vector-valued continuous functions. (Russian) (82f:44005)

secondary classifications:

- Barnsley, M. F. (with Turchetti, G.) Rigorous bounds for charge densities from form factor data. (82g:81112)
 Gragg, William B. Truncation error bounds for T -fractions. (82g:30011)
 Il'muškin, G. M. Solutions of an operator power problem of moments. (Russian) (82d:47031)
 Lind, N. C. See Siu, W. W. C.; et al., (82d:60032)
 Masson, D. Moment problem approximants to the Chandrasekhar H -equation. (82c:45014)
 Sengupta, S. S. See Siu, W. W. C.; et al., (82d:60032)
 Siu, W. W. C. (with Sengupta, S. S.; Lind, N. C.) A linear programming formulation of the problem of moments. (German and Russian summaries) (82d:60032)
 Turchetti, G. See Barnsley, M. F., (82g:81112)
 Yavor, Elie. Extremal problems on moment cones and the Karlin representation theorem. (82a:41023)

44A99 Miscellaneous topics

- Duggal, B. P. The spectrum of a class of integral transforms. (82i:44009)
 Kreid, Tadeusz. The calculus of symbolic operators. (82c:44005)
 Muntean, Ioan. On the mean Cesàro integral. (Romanian) (82m:44009)
 Stanković, Miomir S. A transform which maps differences into derivatives. (Serbo-Croatian summary) (82i:44010)
 Tasche, Manfred (with Wrase, Burghard) Über lineare Differentialgleichungen gebrochener Ordnung und verallgemeinerte Abelsche Integralgleichungen. (82c:44003)
 Wrase, Burghard. See Tasche, Manfred, (82c:44003)

secondary classifications:

- Ravaska, Timo On a theory of surfaces based on tangent spaces of the second kind. (82c:58009)
 Zheng, Wei Xing The generalized Walsh transform and an extremum problem. (Chinese. English summary) (82m:42020)

45-XX INTEGRAL EQUATIONS

45-01 Elementary exposition, textbooks

- Piskorek, Adam ★Równania całkowe. (Polish) [Integral equations] 82b:45001

secondary classifications:

- Fenyő, István ★Moderne mathematische Methoden in der Technik. Band 3. (German) [Modern mathematical methods in engineering. Vol. 3] (82j:00024)

45-02 Advanced exposition (research surveys, monographs, etc.)

- Dudučava, R. V. ★Integral equations in convolution with discontinuous presymbols, singular integral equations with fixed singularities, and their applications to some problems of mechanics. 82c:45001b
 Convolution integral equations with discontinuous presymbols, singular integral equations with fixed singularities, and their applications to problems in mechanics. (Russian. English summary) 82c:45001a
 Mühlh, S. G. (with Prössdorf, Siegfried) ★Singuläre Integraloperatoren. (German) [Singular integral operators] 82c:45002
 Prössdorf, Siegfried See Mühlh, S. G., 82c:45002
 Tuck, E. O. Application and solution of Cauchy singular integral equations. 82c:45003

secondary classifications:

- Guseinov, A. I. (with Muhtarov, H. Š.) ★Введение в теорию нелинейных сингулярных интегральных уравнений. (Russian) [Introduction to the theory of nonlinear singular integral equations] (82g:45013)
 Kabaila, V. Function theory. (Russian. Lithuanian and English summaries) (82b:01031)
 Muhtarov, H. Š. See Guseinov, A. I., (82g:45013)

45-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Bertolino, Milorad Differential and integral equations in Yugoslavia. (Russian) (82i:01035)
 Dorofeeva, A. V. Hilbert's development of the theory of infinite quadratic forms. (Russian. English summary) (82i:01037)
 Elliott, David Integral equations—ninety years on. (82b:01029)
 (Hilbert, David) See Dorofeeva, A. V., (82i:01037)

45-04 Explicit machine computation and programs (not the theory of computation or programming)

45-06 Proceedings, conferences, etc.

- (Herdman, Terry L.) See Integral and functional differential equations, 82d:45001
 (Rankin, Samuel M., III) See Integral and functional differential equations, 82d:45001
 (Stech, Harlan W.) See Integral and functional differential equations, 82d:45001

Conference:

- Integral and Functional Differential Equations ★Integral and functional differential equations. 82d:45001
 Functional-differential equations ★Integral and functional differential equations. 82d:45001

- Integral and functional differential equations ★Integral and functional differential equations. 82d:45001

- Morgantown, W. Va. ★Integral and functional differential equations. 82d:45001

secondary classifications:

- (Busenberg, Stavros N.) See Differential equations and applications in ecology, epidemics, and population problems, (82m:92003)
 (Cooke, Kenneth L.) See Differential equations and applications in ecology, epidemics, and population problems, (82m:92003)
 (Fe'dman, I. A.) See Linear operators and integral equations, (82e:47001)
 (Rusu, G. L.) See Linear operators and integral equations, (82e:47001)
 (Suvetka, I. V.) See Linear operators and integral equations, (82e:47001)
 Claremont, Calif. ★Differential equations and applications in ecology, epidemics, and population problems. (82m:92003)

Conference:

- Differential Equations and Applications in Ecology, Epidemics, and Population Problems ★Differential equations and applications in ecology, epidemics, and population problems. (82m:92003)

- Differential equations and applications in ecology, epidemics, and population problems ★Differential equations and applications in ecology, epidemics, and population problems. (82m:92003)

- Integral equations ★Линейные операторы и интегральные уравнения. (Russian) [Linear operators and integral equations] (82e:47001)

- Linear operators and integral equations ★Линейные операторы и интегральные уравнения. (Russian) [Linear operators and integral equations] (82e:47001)

45A05 Linear integral equations

- Bart, George R. Three theorems on third-kind linear integral equations. 82a:45001
 Geger, É. L. The indeterminate multiplier method in linear integral equations. (Russian) 82m:45001
 de Hoog, F. R. Review of Fredholm equations of the first kind. 82a:45002
 Pops, Maria Solution of the integral equation in $\mathcal{S}'(\mathbb{R}^n)$. (Russian) 82m:45002
 Ramm, Alexander G. Investigation of a class of systems of integral equations. 82c:45004

secondary classifications:

- Chambers, L. G. Some properties of the functional-differential equation $b_0 y'(x) + \int_0^x b(u) y'(\mu^u x) du = a_0 y(x) + \int_0^x a(u) y(\mu^u x) du$. (82k:34073)
 Das, Rabindra Nath A new method for exact solution of transfer equations in finite media. (82j:85006)
 Derkač, V. P. See Grabovskii, B. O.; et al., (82h:81128)
 Grabovskii, B. O. (with Derkač, V. P.; Korsun'skii, V. M.; Odarič, O. M.) Investigation of an integral equation of the interaction of a beam of accelerated electrons with a target. (Russian) (82h:81128)
 Korsun'skii, V. M. See Grabovskii, B. O.; et al., (82h:81128)
 Nguyễn Thi'a Hô'p Solution of a class of operational equations and its applications. (82c:47012)
 Odarič, O. M. See Grabovskii, B. O.; et al., (82h:81128)
 Plešinskii, N. B. On the solution of boundary value problems for the generalized Tricomi equation by the method of integral equations. (Russian) (82g:35000)

45B05 Fredholm integral equations

- Ahner, John F. On constructing the solutions to integral equations when $|\lambda| > |\lambda_1|$. 82b:45001
 Cade, R. Neumann's method for Robin's integral equation in E^2 for a curve with a vertex. 82f:45001
 Cerofolini, G. F. Questions of method in a large class of improperly posed problems. 82g:45001
 Graham, Ivan G. Some application areas for Fredholm integral equations of the second kind. 82b:45002
 Imanaliev, M. I. (with Pankov, P. S.) Generalized solutions of integral equations of the first kind and their representation by Fourier series. (Russian) 82c:45005
 Kailath, Thomas (with Ljung, Lennart; Morf, Martin) Generalized Krein-Levinson equations for efficient calculation of Fredholm resolvents of nondisplacement kernels. 82m:45003
 Kalaba, Robert See Zagustina, E. A., 82h:45002
 Kershaw, Donald Permanents in Fredholm's theory of integral equations. 82j:45001
 Krasnov, I. P. An integral equation of potential theory. (Russian) 82m:45004
 Kress, Rainer On boundary integral equation methods in stationary electromagnetic reflection. 82g:45002
 Lamanova, L. G. A method for reducing integral equations of the first kind to integral equations of the second kind. (Russian) 82g:45003
 Ljung, Lennart See Kailath, Thomas; et al., 82m:45003
 Morf, Martin See Kailath, Thomas; et al., 82m:45003
 Pankov, P. S. See Imanaliev, M. I., 82c:45005
 Saadabaev, A. Regularization of solutions of an integral equation of the first kind with an approximately given kernel and right-hand side. (Russian) 82k:45001
 Timofeeva, E. P. A two-dimensional Fredholm integral equation of the third kind. (Russian) 82c:45001
 Ueno, Suetō Cauchy system for Fredholm resolvents with composite displacement kernels. 82g:45004
 Wiener, Klaus Über eine Erweiterung des Batemanschen Verfahrens für Integralgleichungen. 82m:45005
 Zagustina, E. A. (with Kalaba, Robert) New representation and method of solving Fredholm integral equations. 82h:45002

secondary classifications:

- Bessonov, E. V. See Poljakov, R. V., (82c:65010)
 Bharucha-Reid, A. T. See Christensen, Mark J., (82j:65094a)
 Bros, Jacques (with Pesenti, Danielle) Fredholm theory in complex manifolds with complex parameters: analyticity properties and Landau singularities of the resolvent. (82c:81039)
 Christensen, Mark J. (with Bharucha-Reid, A. T.) Numerical solution of random integral equations. I. Fredholm equations of the second kind. (82j:65094a)
 Ernst, Frederick J. See Hauser, Isidore, (82h:83030)
 Hauser, Isidore (with Ernst, Frederick J.) Proof of a Geroch conjecture. (82h:83030)
 de Hoog, F. R. Review of Fredholm equations of the first kind. (82a:45002)
 Kagiwada, Harriet (with Kalaba, Robert) Imbedding methods for the integral equations for the optimal control of time-lag systems. I. Parameter dependence. (82k:93040)
 Kalaba, Robert See Kagiwada, Harriet, (82k:93040)
 Kalandija, A. I. Plane problem of elasticity theory in a multiconnected domain. (82h:73004)
 Kosel, Ulrich Lokale Lösungen und Verzweigungen der Lösungen nichtlinearer Gleichungen. (82f:58032)
 Lady, L. J. A variation of Nyström's method for Hammerstein equations. (82b:65162)
 Pesenti, Danielle See Bros, Jacques, (82c:81039)
 Poljakov, R. V. (with Bessonov, E. V.) An application of bicubic splines to the solution of two-dimensional integral equations of the second kind with constant limits. (Russian) (82c:65010)
 Prosenko, V. S. (with Solov'ev, A. I.) The symmetric contact problem for a compound strip. (Russian. English summary) (82d:73082)
 Qing, Cheng Rui See Zhang, Chun Yuan; et al., (82e:76078)
 Saadabaev, A. Approximate solution of a Fredholm integral equation of the first kind in the space of continuous functions. (Russian) (82h:45013)

- Schrodl, Ewald ★ Optimale Steuerung linearer dynamischer Systeme durch Lösen Fredholmischer Integralgleichungen. (German) [Optimal control of linear dynamic systems through the solution of Fredholm integral equations] (82c:49011)
- Sloan, Ian H. Quadrature methods for integral equations of the second kind over infinite intervals. (82c:65091)
- Solov'ev, A. I. See Prosenko, V. S., (82b:73082)
- Spector, Scott J. On monotonicity of the optimal strain path in linear viscoelasticity. (82c:73035)
- Sun, Ji Guang See Zhang, Chun Yuan; et al., (82c:76078)
- Volkmer, Hans Integralrelationen mit variablen Grenzen für spezielle Funktionen der mathematischen Physik. (82d:33017)
- Zhang, Chun Yuan (with Sun, Ji Guang; Qing, Cheng Rui) Calculation of the current needed to maintain an equilibrium field in a toroidal plasma. (Chinese. English summary) (82c:76078)

45C05 Eigenvalue problems [See also 34B25, 35Pxx, 45P05.]

secondary classifications:

- Linden, Hansjörg Eigenwertprobleme mit nichtlinear auftretendem Eigenwertparameter in den Randbedingungen. (English summary) (82c:34024a)
- Eigenwertprobleme mit nichtlinear auftretendem Eigenwertparameter in den Randbedingungen. II. (English summary) (82c:34024b)

45D05 Volterra integral equations [See also 34A10.]

- Arnautu, V. Approximation of an integro-differential equation in a Hilbert space. (82c:45006)
- Bennett, John B. Total stability for a Volterra integral equation. 82g:45005
- Buhgeim, A. L. A class of Volterra operator equations of the first kind. (Russian) 82a:45003
- Diekmann, Odo (with van Gils, Stephan) A variation-of-constants formula for nonlinear Volterra integral equations of convolution type. 82f:45002
- van Gils, Stephan See Diekmann, Odo, 82f:45002
- Gripenberg, Gustaf On some positive definite forms and Volterra integral operators. 82g:45006
- On Volterra equations of the first kind. 82c:45007
- A Tauberian problem for a Volterra integral operator. 82h:45003
- Kiffe, T. A Volterra integral equation and multiple valued functions. 82j:45002
- Kim, E. I. (with Ramazanov, M. I.) An integral equation of Volterra type of the second kind. (Russian. Kazakh summary) 82h:45004
- (with Ramazanov, M. I.) Solution of a singular integral equation of Volterra type of the second kind. (Russian. Kazakh summary) 82h:45004
- Nohel, John A. A nonlinear hyperbolic Volterra equation occurring in viscoelasticity. (See 82c:00010)
- Ramazanov, M. I. See Kim, E. I., 82h:45003 and 82h:45004
- Ross, Edward W., Jr. On Volterra integral equations of pulse-convolution type. 82a:45004
- Schechter, Eric One-sided continuous dependence of maximal solutions. 82e:45002
- Sinestrari, Eugenio A nonlinear functional renewal equation. (Italian summary) 82c:45002
- Singh, Peetam A note on the solution of two-dimensional Volterra integral equation by splines. 82d:45002
- Smirnov, M. M. On a Volterra equation with a hypergeometric function in the kernel. (Russian. English summary) 82i:45001
- Strašidinov, A. Uniqueness of the solution of an integral Volterra equation of the first kind in a class of continuous functions. (Russian) 82d:45003
- Staffans, Olof J. A priori bounds for a discontinuous Volterra equation. 82j:45003
- A bound on the solutions of a nonlinear Volterra equation. 82j:45004
- Wheeler, Robert L. On the structure of resolvents of Volterra equations. 82h:45004
- secondary classifications:
- Baillon, Jean-Bernard (with Clément, Ph.) Ergodic theorems for nonlinear Volterra equations in Hilbert space. (82b:45014)
- Baker, Chr. T. H. See Wolkenfelt, P. H. M.; et al., (82f:65143)
- Bavrin, I. I. (with Gusakov, V. A.; Leznov, V. G.) Integro-differential operators and integral representations of holomorphic functions. (Russian) (82j:30057)
- Berger, Marc A. (with Mizel, Victor J.) Volterra equations with Itô integrals. I. (82c:60100a)
- (with Mizel, Victor J.) Volterra equations with Itô integrals. II. (82c:60100b)
- Berikelašvili, G. K. (with Pavlenišvili, G. D.) Approximate solution of certain systems of nonlinear Volterra integral equations of the second kind. (Russian. Georgian and English summaries) (82a:45019)
- Clément, Ph. See Baillon, Jean-Bernard, (82b:45014)
- Friedman, Charles N. Asymptotic forms of solutions of certain linear ordinary differential equations. (82f:34065)
- Gegel', E. I. The indeterminate multiplier method in linear integral equations. (Russian) (82m:45001)
- Gripenberg, Gustaf On the convergence of solutions of Volterra equations to almost-periodic functions. (82c:45008)
- Gusakov, V. A. See Bavrin, I. I.; et al., (82j:30057)
- Haddad, Y. M. Numerical analysis in nonlinear viscoelasticity. (82j:73033)
- van der Houwen, P. J. See Wolkenfelt, P. H. M.; et al., (82f:65143)
- Kiffe, T. An abstract linear Volterra equation with a nonconvolution kernel. (82b:45020)
- Kravec, T. N. Existence of a solution of a stochastic integral equation of Volterra type. (Russian) (82a:60092)
- Leznov, V. G. See Bavrin, I. I.; et al., (82j:30057)
- Leznov, A. N. (with Sav'ev, M. V.; Smirnov, V. G.) Explicit solutions to two-dimensionalized Volterra equations. (82g:35108)

- Li, Bing Xi On the uniqueness and stability of limit cycle for negative feedback cellular control system. (Chinese) (82i:34031)
- Macne, L. B. Generating functions of integral operators. (Russian) (82c:47041)
- Meyer, Heiner Integralgleichungen in Entscheidungsnetzwerken. (82c:90042)
- Mizel, Victor J. See Berger, Marc A., (82c:60100a) and (82c:60100b)
- Muszyński, Jerzy On a nonlinear integral equation. (82j:45014)
- Pasikov, V. L. A problem of encounter of motions for integral equations. (Russian) (82d:90140)
- Pavlenišvili, G. D. See Berikelašvili, G. K., (82a:45019)
- Rennolet, Charles Existence and boundedness results for abstract nonlinear Volterra equations of nonconvolution type. (82g:45024)
- Rzepecki, Bogdan A note on fixed point theorem of Maia. (Romanian summary) (82b:47056)
- Sav'ev, M. V. See Leznov, A. N.; et al., (82g:35108)
- Štěpánek, L. N. See Tivončuk, V. I., (82f:65140)
- Smirnov, V. G. See Leznov, A. N.; et al., (82g:35108)
- Soni, K. (with Soni, Raj P.) On the asymptotic behavior of the solution of a nonlinear Volterra integral equation. (82g:45020)
- Soni, Raj P. See Soni, K., (82g:45020)
- Stech, Harlan W. (with Williams, Michael) Stability in a class of cyclic epidemic models with delay. (82c:92055)
- Szufla, Stanisław On infinite systems of Volterra integral equations in Banach spaces. (82b:45021)
- Tivončuk, V. I. (with Štěpánek, L. N.) Numerical-analytic method for solving systems of linear Volterra integral equations. (Russian) (82f:65140)
- Tsuruta, Kunio On linear integro-differential equations in a Banach space. (82g:45026)
- Vorel, Zdeněk Continuous dependence on parameters. (82h:34005)
- Webb, G. F. A genetics model with age dependence and spatial diffusion. (See 82m:92003)
- Werbowski, Jarosław On some asymptotic behaviour of solution of a Volterra integral equation with delay. (82c:45019)
- Widom, Harold Szegő's limit theorem: the higher-dimensional matrix case. (82c:47034)
- Williams, Michael See Stech, Harlan W., (82c:92055)
- Wolkenfelt, P. H. M. (with van der Houwen, P. J.; Baker, Chr. T. H.) Analysis of numerical methods for second kind Volterra equations by imbedding techniques. (82f:65143)

45Exx Singular integral equations [See also 30E20, 30E25, 44A15, 44A35.]

45E05 Integral equations with kernels of Cauchy type [See also 35J15.]

- Abdullaeva, G. G. (with Musaev, B. I.) Regularization of a singular integral along an open contour. (Russian) 82j:45005
- Bil'man, B. M. (with Džangibekov, G.) Solvability in spaces L_p with weight of a two-dimensional singular integral equation. (Russian. Tajiki summary) 82g:45007
- Čerškii, Ju. I. Singular integral equation with shift. (Russian. English summary) 82d:45004
- Chakrabarti, Aloknath Derivation of the solution of certain singular integral equations. 82a:45005
- (with Williams, W. E.) A note on a singular integral equation. 82c:45008
- Didenko, V. D. Applicability of the reduction method to systems of singular integral equations. (Russian) 82g:45008
- Džangibekov, G. See Bil'man, B. M., 82g:45007
- González Diegos, Belarmino Singular integral equations and the Riemann boundary value problem on nonsmooth closed curves. (Russian) 82e:45003
- Hjcia, Lechosław On a class of singular integral equations. 82f:45003
- Haikin, M. I. A system of singular integral equations in a special case as an ill-posed problem. (Russian) 82d:45006
- On the theory of the singular case of singular integral equations. (Russian) 82c:45003
- Husnutdinov, R. Š. (with Husnutdinova, N. B.) Solutions of a class of singular integral equations perturbed by a nonlinear term. (Russian) 82a:45005
- Husnutdinova, N. B. See Husnutdinov, R. Š., 82a:45005
- Iskenderov, B. B. Equivalent regularization of a class of singular equations with two Carleman shifts. (Russian. Azerbaijani and English summaries) 82e:45002
- Issa, R. B. A characteristic singular integral equation. (Russian) 82h:45005
- Jones, D. S. Note on the integral equation for a straight wire antenna. 82e:45004
- Kaziev, A. A boundary value problem with shift for a system of equations of composite type. (Russian. Tajiki summary) 82m:45006
- Kosulin, A. E. Systems of singular integral equations with double degeneracy of the symbol matrix on open contours. (Russian) 82a:45006
- Krupnik, N. Ja. See Verbickii, I. E., 82b:45005
- Lowndes, J. S. On an integral equation. (Spanish summary) 82e:45005
- Mastjanica, V. S. See Šesko, M. A., 82c:45009
- Musaev, B. I. See Abdullaeva, G. G., 82j:45005
- Popov, V. G. (with Tihonenko, M. Ja.) Approximate solution of a singular integral equation with involution. (Russian) (See 82g:65004)
- Saginavili, A. I. Singular integral equations with coefficients that have discontinuities of semi-almost-periodic type. (Russian) 82j:45006
- Šesko, M. A. Inversion of a multidimensional integral of Cauchy type. (Russian. English summary) 82a:45007
- (with Mastjanica, V. S.) A solution of a two-dimensional singular integral equation of the first kind. (Russian. English summary) 82c:45009
- Two-dimensional singular integral equations of the first kind with Cauchy kernels. (Russian) 82j:45007
- Simonenko, I. B. On the relation between local factorizability and the local Noethericity property. (Russian. Georgian and English summaries) 82f:45004
- Tihonenko, M. Ja. See Popov, V. G., (See 82g:65004)

Verbitskii, I. E. (with Krupnik, N. Ja.) Exact constants in theorems on the boundedness of singular operators in L_p spaces with a weight and their application. (Russian) **82b:45005**

Williams, W. E. See Chakrabarti, Aloknath, **82c:45008**

secondary classifications:

Ahmedov, N. K. Solvability of nonlinear singular integral equations by the method of successive approximations in spaces of summable functions. (Russian) **(82c:45006)**
 Baldino, R. R. Integral equations for mixed problems: Laplacian and linear elasticity operators. **(82a:35030)**
 Belocerkovskii, S. M. (with Lifanov, I. K.) Some singular integral equations of aerodynamics. (Russian) **(82b:76042)**

Bessétinov, M. E. A boundary value problem with shift for analytic functions. (Russian) **(82c:30055)**

Costabel, Martin Fredholm theory of one-dimensional singular integral operators with Carleman shift. **(82d:47042)**

Coz, Marcel (with Rochus, Pierre) Extension of the Marchenko equation to non-Hermitian differential systems. **(82c:81123)**

Deng, Yao Hua The index formula for equations with algebraic operators. **(82f:47015)**

Didenko, V. D. Approximate solution of systems of singular integral equations in subspaces of continuous functions. (Russian) **(82b:65160)**

Garadzev, A. G. An n th-order integro-differential equation. (Russian) **(82c:45009)**

Gerasoulis, Apostolos The use of piecewise quadratic polynomials for the solution of singular integral equations of Cauchy type. **(82a:65123)**

Gerus, O. F. On a singular integral equation and Riemann boundary value problem. (Russian) **(82c:30060)**

González Diegos, Belarmino The Riemann boundary value problem and singular integral equations. (Russian) **(82i:30061)**

Hai, M. V. Inversion of a system of integral equations of a three-dimensional problem of mathematical fracture theory. (Russian. English summary) **(82d:73072)**

Ioakimidis, Nikolaos I. On the weighted Galerkin method of numerical solution of Cauchy type singular integral equations. **(82k:65083)**

See also Theocaris, P. S., **(82b:73049)**

Iskenderov, B. B. A nonlinear boundary value problem for piecewise analytic functions. (Russian) **(82c:30056)**

Jen, Erica (with Srivastav, R. P.) Cubic splines and approximate solution of singular integral equations. **(82a:45021)**

(with Srivastav, R. P.) Cubic splines and approximate solution of singular integral equations. **(82c:65082)**

Kokilasvili, V. M. (with Paatašvili, V. A.) Discontinuous problem of linear conjugation and singular integral equations. (Russian) **(82g:30073)**

Kröger, Helmut Hilbert space approach to the three- and four-nucleon systems. **(82d:81125)**

Lifanov, I. K. On the discrete vortex method for a wing of infinite span and the Prandtl equation for a wing of finite span. (Russian) **(82c:76068)**

Quadrature formulas and the Poincaré-Bertrand formula for singular integrals. (Russian) **(82d:41040)**

See also Belocerkovskii, S. M., **(82b:76042)**

Lu, Jian Ke A generalized residue theorem and its applications. (Chinese) **(82j:30059)**

Magnaradze, L. G. A new representation of a pair of analytic functions and its applications. (Russian. Georgian and English summaries) **(82c:30064)**

Mastjanica, V. S. See Šekko, M. A., **(82c:45018)**

Mjasnikov, A. G. Singular integral operators with non-Carleman shift and piecewise continuous coefficients. (Russian) **(82c:47069)**

Njaga, V. I. See Zolotarevskii, V. A., **(82m:45024)**

Paatašvili, V. A. See Kokilasvili, V. M., **(82g:30073)**

Prössdorf, Siegfried (with Schmidt, Günter) Notwendige und hinreichende Bedingungen für die Konvergenz des Kollokationsverfahrens bei singulären Integralgleichungen. **(82m:45022)**

(with Schmidt, Günter) A finite element collocation method for singular integral equations. **(82m:65127)**

Puhtev, G. N. ★Точные методы вычисления интегралов типа Коши. (Russian) [Exact methods for calculating integrals of Cauchy type] **(82m:44006)**

Rahimov, R. M. A remark on the Riemann boundary value problem in the case of intersecting contours. (Russian) **(82c:30058)**

Rochus, Pierre See Coz, Marcel, **(82c:81123)**

Rokva, Ž. P. A method for the numerical solution of certain problems of plane elasticity theory. (Russian. Georgian and English summaries) **(82a:73015)**

Schmidt, Günter See Prössdorf, Siegfried, **(82m:65127)**; **(82m:45022)**

Seleznov, V. A. The Riemann boundary value problem in classes of Jordan boundaries. (Russian) **(82b:30052)**

Selim, M. S. The nonhomogeneous Riemann problem on a nonsmooth open curve. (Russian) **(82c:30061)**

Šekko, M. A. (with Mastjanica, V. S.) Approximate solution of singular integral equations by the degenerate kernel method. (Russian) **(82d:45018)**

Soldatov, A. P. Singular operators with a shift on the piecewise-smooth line in weight spaces. (Russian) **(82b:47036)**

Srivastav, R. P. See Jen, Erica, **(82a:45021)** and Jen, Erica, **(82c:65082)**

Svanadze, M. Ž. Asymptotic estimates for integrals of potential type on infinite manifolds. (Russian. Georgian and English summaries) **(82c:73012)**

Theocaris, P. S. (with Ioakimidis, Nikolaos I.) A numerical method for the solution of plane crack problems in finite media. **(82b:73049)**

Zolotarevskii, V. A. (with Njaga, V. I.) Approximate solution of a singular integral equation with shift. (Russian) **(82m:45024)**

functions. (Russian. Tajiki summary) **82j:45008**

Aleksandrov, V. M. (with Sumbatjan, M. A.) Asymptotic solution of convolution-type integral equations with a logarithmic singularity of the transform of the kernel, and applications in problems of mechanics. **82k:45004**

Arabadzjan, L. G. On a conservative Wiener-Hopf equation. (Russian. Armenian and English summaries) **82m:45007**

Berkolaito, M. Z. On an operator of conjugation in spaces of Hölder type. (Russian. Georgian and English summaries) **82g:45009**

Christensen, Mark J. See Moss, William F., **82b:45007**

Clément, Ph. On abstract Volterra equations with kernels having a positive resolvent. **82a:45008**

Dixit, L. A. On a convolution integral equation involving the generalised Bateman function $K_p^{a,b}(x)$ as its kernel. (Hindi. English summary) **82b:45006**

Dudučava, R. V. Solution of a convolution equation on a quadrant. (Russian) **82a:45009**

(with Saginasvili, A. I.) Integral equations of convolution on the half axis with semi-almost-periodic presymbols. (Russian) **82g:45010**

Ganeev, R. M. A generalized Abel integral equation. (Russian) **82d:45007**

Haikin, M. I. Homogeneous Wiener-Hopf equation in a class of functions of moderate growth. (Russian) **82d:45008**

Juhanonov, N. N. An integral equation of convolution type containing the complex-conjugate value of the unknown function, and its approximate solution. (Russian. Tajiki summary) **82c:45010**

Luk'janenko, V. A. An exceptional case of the equation of smoothly dynamic transition. (Russian) **82c:45011**

An equation of smooth transition in the space of slowly growing functions. (Russian. English summary) **82d:45009**

Moss, William F. (with Christensen, Mark J.) Scattering and heat transfer by a strip. **82b:45007**

Novokšenov, V. Ju. Equations in convolutions on a finite interval and factorization of elliptic matrices. (Russian) **82d:45010**

Pal'cev, B. V. Convolution equation on a finite interval for a class of symbols having power asymptotic behavior at infinity. (Russian) **82c:45006**

Generalization of the Wiener-Hopf method for convolution equations of a finite interval with symbols having power asymptotic behavior at infinity. (Russian) **82f:45005**

Rubin, B. S. On the Noethericity of integral equations of the first kind with a finite number of kernels of potential type. (Russian) **82d:45011**

Saginasvili, A. I. See Dudučava, R. V., **82g:45010**

Sumbatjan, M. A. See Aleksandrov, V. M., **82k:45004**

Vinogradova, G. Ju. Singular integral operators on the axis with fractionally linear shift in spaces with a weight. (Russian) **82a:45010**

secondary classifications:

Anderssen, R. S. (with Calligaro, R. B.) Nondestructive testing of optical-fibre preforms. **(82k:78011)**

Calligaro, R. B. See Anderssen, R. S., **(82k:78011)**

Chakrabarti, Aloknath On a system of Wiener-Hopf equations associated with a mixed diffraction problem. **(82m:78015)**

Chew, W. C. (with Kong, J. A.) Asymptotic formula for the capacitance of two oppositely charged discs. **(82h:78008)**

Diekmann, Otto Clines in a discrete time model in population genetics. **(82i:92012)**

Dudučava, R. V. ★Integral equations in convolution with discontinuous presymbols, singular integral equations with fixed singularities, and their applications to some problems of mechanics. **(82c:45001b)**

Convolution integral equations with discontinuous presymbols, singular integral equations with fixed singularities, and their applications to problems in mechanics. (Russian. English summary) **(82c:45001a)**

(with Saginasvili, A. I.) Integral convolution operators on the half axis with semi-almost-periodic presymbols. (Russian. Georgian and English summaries) **(82b:47041)**

Engibarjan, N. B. Factorization of matrix functions and nonlinear integral equations. (Russian. Armenian and English summaries) **(82d:45013)**

Entov, V. M. (with Odisarija, M. G.) Asymptotic investigation of seepage flows in the case of a power resistance law. **(82k:76067)**

Fel'dman, I. A. Wiener-Hopf operator equations and their application to the transport equation. **(82d:47034)**

Fényes, T. On the operational solution of a convolution type integral equation of the third kind. **(82a:44005)**

Gorodetskii, M. B. A Toeplitz operator in a space of infinitely differentiable functions of two variables. (Russian) **(82b:47030)**

Idemen, Mihail A new method to obtain exact solutions of vector Wiener-Hopf equations. **(82d:30043)**

Karapetjan, N. K. On the question of complete continuity of operators of convolution type. (Russian) **(82d:47042)**

Kong, J. A. See Chew, W. C., **(82h:78008)**

(Lekkerkerker, Cornelius Gerrit) See Fel'dman, I. A., **(82d:47034)**

Lepik, R. The invertibility of the discrete Wiener-Hopf operator with operator coefficients. (Russian. English summary) **(82c:47031)**

The Fredholmness of a multidimensional discrete Wiener-Hopf operator. (Russian. English summary) **(82c:47032)**

(Lerer, L. E.) See Fel'dman, I. A., **(82d:47034)**

Odisarija, M. G. See Entov, V. M., **(82k:76067)**

Okrasinski, W. On a nonlinear convolution equation occurring in the theory of water percolation. **(82b:76056)**

Pedas, A. See Vainikko, G., **(82c:45014)**

Rawlins, A. D. Simultaneous Wiener-Hopf equations. (French summary) **(82c:45012)**

A note on the factorization of matrices occurring in Wiener-Hopf problems. **(82a:15013)**

(with Williams, W. E.) Matrix Wiener-Hopf factorisation. **(82c:15020)**

45E10 Integral equations of the convolution type (Abel, Picard, Toeplitz and Wiener-Hopf type) [See also 47B35.]

Abdurahmanov, R. Spectra of some convolution equations in spaces of generalized

- Rogovov, N. N. Some boundary value problems and integral equations of convolution type encountered in radiation transfer theory. (Russian. English summary) **82b:85008**
- Saginalvili, A. I. See Dudašava, R. V., (82b:47041)
- Skorikov, A. V. Bisingular operators in convolutions and bipotentials in spaces with a mixed norm. (Russian) **82c:47038**
- (Troelstra, R.) See Fečkan, I. A., (82d:47034)
- Vainikko, G. (with Pedas, A.) The properties of solutions of weakly singular integral equations. **82b:45014**
- Williams, W. E. See Rawlins, A. D., (82c:15020)

45E99 None of the above, but in this section

- Atkinson, D. Study of a singular integral equation of Calogero. (Italian and Russian summaries) **82d:45012**
- Becklars, Joerg. Weakly singular integral equations—smoothness properties and numerical solution. **82a:45011**
- Didenko, V. D. On an approximate solution of singular integral equations with Carleman shift and complex conjugate values of the unknown function. (Russian) **82c:45007**
- Džuraev, A. Some two-dimensional integral equations over a bounded domain. (Russian) **82a:45012**
- Hahnuradov, E. Some estimates for a singular integral with locally summable density. (Russian) **82b:45008**
- Lifanov, I. K. Ill-posedness and regularization of the numerical solution of singular integral equations of the first kind. (Russian) **82c:45008**
- Pedas, A. Piecewise linear approximation of the solution of an integral equation with a logarithmic singularity in the kernel. (Russian. English summary) **82b:45009**
- On the smoothness of the solution of an integral equation with a weakly singular kernel. (Russian. English summary) **82b:45010**
- Prabhakar, T. R. Some singular integral equations involving Laguerre polynomials and finite parts of divergent integrals. **82b:45011**
- Šerman, D. I. On some types of singular integral equations occurring in applications. **82c:45003**

secondary classifications:

- Guseinov, E. G. (with Muhammadiev, M.) A singular integral along a smooth curve in spaces. (Russian) **82c:30062**
- Komjak, I. I. On the normal Hausdorff solvability of a two-dimensional singular integral equation. (Russian) **82c:47037**
- Muhammadiev, M. See Guseinov, E. G., (82c:30062)
- Sun, Ji Guang. Regularization of singular integral equations on a complex hypersphere. (Chinese) **82c:42017**
- Tašev, Ž. A singular operator equation with Carleman shift of order two in normed rings. (Russian) **82f:47019**
- Vasilevskii, N. L. On the theory of symbols for Banach algebras of operators that generalize algebras of singular integral operators. (Russian) **82m:47024**

45Fxx Systems of linear integral equations

45F05 Systems of nonsingular linear integral equations

- Kordadze, R. A. The majorant method for infinite systems of integral equations. (Russian) **82b:45012**

secondary classifications:

- Frisk, George V. See Oppenheim, Alan V.; et al., (82b:42018)
- Haikin, M. I. On the theory of the singular case of singular integral equations. (Russian) **82b:45003**
- Martinez, David R. See Oppenheim, Alan V.; et al., (82b:42018)
- Oppenheim, Alan V. (with Frisk, George V.; Martinez, David R.) Computation of the Hankel transform using projections. **82b:42018**

45F10 Dual, triple, etc., integral and series equations

- Ahuja, Gopi. A formal solution of dual integral equations with Hankel kernel. **82m:45008**
- Babeiko, V. A. On the theory of mixed problems in arbitrary domains. (Russian) **82c:45005**
- Dhaliwal, Ranjit S. Note on a paper by B. M. Singh and R. S. Dhaliwal: "Triple trigonometrical integral equations with an application" [Applicable Anal. **10** (1980), no. 2, 83–92; MR 81f:45011]. **82a:45013**
- Dwivedi, A. P. (with Trivedi, T. N.) Some further dual series equations involving generalised Bateman K-functions. **82m:45009**
- (with Singh, V. B.) Dual sequence equations involving Jacobi and Laguerre polynomials. **82m:45010**
- (with Singh, V. B.) Correction: "Certain simultaneous dual integral equations associated with kernel of Fox" [Indian J. Mech. Math. **16** (1978), no. 2, 1–7; MR 81c:45006]. **82c:45006**
- (with Sharma, J. P.) Simultaneous triple integral equations involving G-functions of two variables. **82g:45011**
- (with Gupta, P. M.) A class of triple equations involving series of Jacobi and Laguerre polynomials. **82c:45009**
- Fan, Tian You. Dual integral equations and systems of dual integral equations and their applications in solid mechanics and fluid mechanics. (Chinese) **82m:45011**
- Gupta, P. M. See Dwivedi, A. P., **82c:45009**
- Pathak, R. S. Erratum: "Dual series equations involving heat polynomials" [Nederl. Akad. Wetensch. Indag. Math. **41** (1979), no. 4, 455–463; MR 80k:45008]. **82a:45014**
- Rawlins, A. D. Simultaneous Wiener-Hopf equations. (French summary) **82c:45012**
- Sharma, J. P. See Dwivedi, A. P., **82g:45011**
- (Singh, Brij M.) See Dhaliwal, Ranjit S., **82a:45013**

- Singh, V. B. See Dwivedi, A. P., **82c:45006** and **82m:45010**
- Srivastava, Hari M. Certain dual series equations involving Jacobi polynomials. (Italian summary) **82j:45009**
- Trivedi, T. N. See Dwivedi, A. P., **82m:45009**

secondary classifications:

- Dwivedi, A. P. (with Gupta, P. M.) Quadruple series equations involving Jacobi polynomials of different indices. **82g:33025**
- Gupta, P. M. See Dwivedi, A. P., (82g:33025)
- Mujumdar, Prabha. See Palaiya, R. M., (82b:73029)
- Palaiya, R. M. (with Mujumdar, Prabha) Shear wave interaction with a pair of interface strips. **82b:73029**

45F15 Systems of singular linear integral equations

- Hvoles, A. A. Singular integral equations in spaces $C_\alpha(M)$. (Russian) **82g:45012**

secondary classifications:

- Caprini, I. General method of using positivity in analytic continuations. (French summary) **82j:32029**
- Gadzhev, N. M. Convergence and order of convergence of two-parameter families of singular integrals. (Russian. Azerbaijani and English summaries) **82c:47062**
- Mullikin, T. W. (with Siewert, C. E.) Radiative transfer in inhomogeneous atmospheres. **82j:85007**
- Prössdorf, Siegfried (with Silbermann, Bernd) Projektionsverfahren zur Lösung von Systemen singularer Gleichungen vom nicht normalen Typ. **82k:47019**
- Siewert, C. E. See Mullikin, T. W., (82j:85007)
- Silbermann, Bernd. See Prössdorf, Siegfried, (82k:47019)

45F99 None of the above, but in this section

secondary classifications:

- Thomas, K. S. Galerkin methods for singular integral equations. **82c:65092**

45Gxx Nonlinear integral equations [See also 47Hxx.]

45G05 Singular nonlinear integral equations

- Ahmedov, N. K. Solvability of nonlinear singular integral equations by the method of successive approximations in spaces of summable functions. (Russian) **82b:45006**
- Ashabov, S. N. On the applicability of the method of monotone operators to nonlinear singular equations in $L_2(-\infty, \infty)$. (Russian. Azerbaijani and English summaries) **82c:45013**
- Investigation of nonlinear singular integral equations by the method of monotone operators. (Russian) **82b:45013**
- Guseinov, A. I. (with Muhtarov, H. Š.) ★ Введение в теорию нелинейных сингулярных интегральных уравнений. (Russian) [Introduction to the theory of nonlinear singular integral equations] **82g:45013**
- Krotova, E. N. On a method for solving a system of nonlinear integral equations of Hammerstein type. (Russian) **82k:45007**
- Milenkova, T. A. Investigation of a nonlinear integral equation. (Russian) **82f:45006**
- Muhtarov, H. Š. See Guseinov, A. I., **82g:45013**
- Sečuk, V. N. On the existence of a Fréchet derivative for an operator that is defined by a system of nonlinear singular integral equations. (Russian) **82m:45012**
- Turmatov, T. Application of the Newton-Kantorovič method to the solution of a system of singular integral equations. (Russian) **82b:45014**
- Voznjak, L. S. Application of a projection-iteration analogue of the Newton-Kantorovič method to a nonlinear singular integral equation with a Cauchy kernel. (Russian) **82c:45007**

secondary classifications:

- Lobo, M. (with Sachdev, P. L.) Some direct numerical approaches to the solution of the singular nonlinear transonic integral equation. **82c:76072**
- Milojević, P. S. Fredholm alternatives and surjectivity results for multivalued A -proper and condensing mappings with applications to nonlinear integral and differential equations. **82a:47051**
- Nohel, John A. Nonlinear Volterra equations for heat flow in materials with memory. **82g:45023**
- Sachdev, P. L. See Lobo, M., (82c:76072)
- Selim, M. S. A nonlinear loaded Hilbert problem. (Russian) **82i:30062**
- The homogeneous Riemann problem on a nonsmooth open curve. (Russian) **82c:30060**
- Volohin, V. A. Approximate solution of multidimensional weakly singular and singular integral equations. (Russian) **82g:45019**

45G10 Other nonlinear integral equations

- Corduneanu, Adrian. Positive solutions for some functional equations. (Romanian summary) **82b:45008**
- Engibarjan, N. B. Factorization of matrix functions and nonlinear integral equations. (Russian. Armenian and English summaries) **82b:45013**
- Gripenberg, Gustaf. On the convergence of solutions of Volterra equations to almost-periodic functions. **82k:45008**
- Inoue, Yoshinori (with Michihito, Keiji) A method of multiple scales for integral equations. **82f:45007**
- Michihito, Keiji. See Inoue, Yoshinori, **82f:45007**
- Serikbaev, A. U. A nonlinear integral equation of the first kind in an inverse problem of

potential theory. (Russian) **82m:45013**

Susolkin, V. I. Existence of a solution of a nonlinear integral equation of the first kind. (Russian) **82c:45009**

secondary classifications:

Aló, Richard A. Some topological considerations for Hammerstein operators on L^p -spaces. (82c:47081)

Begmatov, A. Approximation of solutions of a countable system of nonlinear integral equations by solutions of corresponding truncated systems. (Russian) (82j:45011)

Dale, William D. T. See Rossy, Peter J., (82d:82068)

Das Gupta, Malaya Some results on operators. (82d:47058)

Diekmann, Odo (with van Gils, Stephan) A variation-of-constants formula for nonlinear Volterra integral equations of convolution type. (82f:45002)

Geine, A. G. Solvability of a boundary value problem for the nonlinear Boltzmann equation in a bounded domain. (Russian) (82d:76071)

van Gils, Stephan See Diekmann, Odo, (82f:45002)

Gorjacheva, I. G. Plane and axisymmetric contact problems for rough elastic bodies. (82h:73078)

Gupta, Chaitan P. On functional equations of Fredholm and Hammerstein type with applications to existence of periodic solutions of certain ordinary differential equations. (82e:47078)

Heiss, W. D. Power series expansion for a crossing-symmetric vertex function. (82h:81068)

London, Stig-Olof L^2 -solutions of some integral equations with positive definite kernels. (82d:45016)

Osokin, A. E. (with Suvorova, Ju. V.) Nonlinear governing equation of a hereditary medium and a methodology of determining its parameters. (82h:73040)

Ramm, Alexander G. Existence, uniqueness and stability of solutions to some nonlinear oscillations problems. (82h:34055)

Rossy, Peter J. (with Dale, William D. T.) Generalized recursive solutions to Ornstein-Zernike integral equations. (82d:82068)

Suvorova, Ju. V. See Osokin, A. E., (82h:73040)

Wang, Frank J. S. Stability of an age-dependent population. (82d:92028)

Weinitschke, H. J. On axisymmetric deformations of nonlinear elastic membranes. (82a:73013)

Yoshimura, Tetz Existence and local uniqueness of solutions of the Percus-Yevick equation. (82c:82020)

45H05 Miscellaneous special kernels [See also 44A15.]

Ahuja, Gopi On Whittaker transform of two variables. **82a:45015**

Anikonov, Ju. E. Uniqueness of the solution of integral equations of the first kind with integral kernels. (Russian) **82c:45014**

(Dhaliwal, Ranjit S.) See Williams, W. E., **82g:45014**

Jain, Sudha See Prabhakar, T. R., **82b:45015**

Prabhakar, T. R. (with Jain, Sudha) Generalized Bessel function and some integral equations. **82b:45015**

(Singh, Brij M.) See Williams, W. E., **82g:45014**

Williams, W. E. Note on a paper by B. M. Singh and R. S. Dhaliwal: "Dual integral equations with a trigonometric kernel" [Proc. Edinburgh Math. Soc. (2) **22** (1979), no. 3, 213-215; MR **81b:45011**]. **82g:45014**

secondary classifications:

Makarov, I. A. The Frankl' problem and formulas for inversion of certain integral equations with special functions in the kernels. (Russian) (82i:35128)

Peterson, William (with Verhoff, Frank) Properties of an integral equation describing enzyme activity. (82j:92030)

Verhoff, Frank See Peterson, William, (82j:92030)

45J05 Integro-ordinary differential equations

Alexiades, Vasilios Almost periodic solutions of an integro-differential system with infinite delay. **82g:45015**

Angelov, V. G. (with Bainov, D. D.) Existence and uniqueness of the solution of the generalized Cauchy problem for some nonlinear integro-differential equations in Banach space. (Russian) **82d:45014**

Atdaev, S. On the convergence of some methods of two-sided approximations for Volterra integro-differential equations. (Russian. Turkmen and English summaries) **82i:45004**

Bainov, D. D. (with Miluševa, S. D.) Application of the freezing coefficient method for the solution of multipoint boundary value problems with a nonlinear boundary condition for a class of integro-differential equations. (Russian) **82a:45016**

See also Angelov, V. G., **82d:45014**

Boudourides, Moses A. On asymptotic equivalence of bounded solutions of two integro-differential equations. **82j:45010**

B'rzakov, D. G. (with Račinov, I.) Solvability of an integro-differential equation in some classes of entire functions. (Bulgarian. Russian and English summaries) **82b:45016**

Carvalho, L. A. V. On the continuation to the left of solutions of an integro-differential equation. **82b:45015**

Garadzhev, A. G. An n th-order integro-differential equation. (Russian) **82h:45009**

Glashoff, Klaus (with Sprekels, Jürgen) An application of Glicksberg's theorem to set-valued integral equations arising in the theory of thermostats. **82f:45008**

Grace, S. R. (with Lalli, B. S.) On continuability and boundedness of solutions of certain second order integro-differential equations. **82i:45005**

Grozdev, S. I. Transients in linear systems described by a class of integro-differential equations. (Bulgarian. Russian and English summaries) **82h:45017**

Gul'ka, S. S. A projective-iterative method for finding periodic solutions of nonlinear

systems of integro-differential equations with impulse action. (Russian) **82i:45006**

A projection method for averaging integro-differential equations. (Russian.

English summary) **82i:45007**

Iskandarov, S. See Ved', Ju. A., **82m:45015**

Jakovlev, M. N. Estimates of the solutions of two-point problems for systems of first-order integro-differential equations and the method of lines. (Russian) **82h:45018**

Kadob'janskii, R. M. Solution of systems of linear integro-differential equations by means of Wiener integrals. (Russian. English summary) **82h:45011a**

Kasymov, K. A. Estimates of solutions of linear singularly perturbed second-order

integro-differential equations. (Russian. Kazakh summary) **82i:45008**

Kaziev, V. M. The Goursat problem for a loaded integro-differential equation. (Russian) **82e:45010**

Lalli, B. S. See Grace, S. R., **82i:45005**

Leitman, M. J. An integro-differential equation for plane waves propagating into a random fluid: asymptotic behavior. **82g:45016**

Loginov, V. M. Comparison theorems for solutions of integro-differential equations with multipoint boundary conditions. (Russian) **82c:45015**

Averaging of certain systems of integro-differential equations that are unsolvable with respect to a derivative, with a multipoint linear boundary condition. (Russian) **82i:45009**

London, Stig-Olof L^2 -solutions of some integral equations with positive definite kernels. **82d:45016**

Mellier, T. K. On the question of the asymptotic representation of solutions of a system of integro-differential equations, containing a small parameter. (Russian) **82i:45010**

Miluševa, S. D. See Bainov, D. D., **82a:45016**

Morchalo, J. On differential inequality for nonlinear integro-differential equation with retardation. **82d:45017**

Nădăru, P. On an integro-differential equation. (Romanian. English summary) **82h:45010**

Račinov, I. See B'rzakov, D. G., **82b:45016**

Ruhlin, B. I. Fox integro-differential equations and their systems in the space of generalized functions. (Russian) **82i:45009**

Seifert, George On certain solutions of an integro-differential equation. **82m:45014**

Singh, Bhagat Initially and eventually dominating nonoscillatory solutions in integro-differential difference equations. **82c:45016**

Sin'ko, G. I. Asymptotic behavior of eigenvalues of a boundary value problem for an integro-differential operator. (Russian) **82c:45017**

Sprekels, Jürgen See Glashoff, Klaus, **82f:45008**

Tsuruta, Kunio Regularity of solutions to an abstract inhomogeneous linear integro-differential equation. **82h:45010**

Ved', Ju. A. (with Iskandarov, S.) A method of studying the boundedness of solutions of first-order Volterra linear integro-differential equations that are not solved with respect to the derivative. (Russian) **82m:45015**

secondary classifications:

Aggarwala, B. D. See Gopalsamy, K., (82f:92029)

Alm, Hyun J. Vibrations of a pendulum consisting of a bob suspended from a wire: the method of integral equations. (82d:70039)

Bainov, D. D. See Hristova, S. G., (82i:34077)

Begmatov, A. On the nonlinear integro-differential equation of the theory of unsteady filtration with unknown boundary. (82i:76082)

Bilopols'ka, Ja. I. A system of quasilinear integro-differential equations and the Markov processes associated with them. (Russian) (82c:60109)

Dai, Lo Sheng Nonconstant periodic solutions in predator-prey systems with continuous time delay. (82i:92034)

Dužkov, P. N. See Veleř, G. D., (82g:65066)

Eremin, M. S. Equivalence in A_p of an integro-differential operator of a certain type and Euler's operator. (Russian) (82m:47036)

Gopalsamy, K. (with Aggarwala, B. D.) Limit cycles in two species competition with time delays. (82f:92029)

Hristova, S. G. (with Bainov, D. D.) Globally bounded solutions of a class of integro-differential equations with deviating argument. (Russian. Romanian summary) (82i:34077)

Katamadze, R. G. On the solution of a new boundary-contact problem of the theory of elasticity. (Russian. Georgian and English summaries) (82h:73079)

Kimmel, M. Integro-differential equations in cellular populations dynamics. (82a:92029)

Kurpel', M. S. (with Šuvar, B. A.) ★Двусторонние операторные неравенства и их приложения. (Russian) [Two-sided operator inequalities and their applications] (82j:47002)

Larionov, G. S. The averaging method in the "predator-prey" system. (Russian) (82j:92055)

Marino, Mario On the regularization of solutions of the Cauchy problem for abstract differential equations of evolution of Schrödinger type. (Italian. English summary) (82c:47068)

Nigul, U. The method of successive integration of the linear inhomogeneous wave equations in the theory of transient wave propagation in nonlinear hereditary elastic media. (French and German summaries) (82a:73020)

Pachpatte, B. G. A note on second order integro-differential inequalities of the Gronwall-Bellman type. (Serbo-Croatian summary) (82g:26022)

Post, Wilfred M. (with Travis, Curtis C.) Global stability in ecological models with continuous time delay. (82j:92056)

Rzepecki, Bogdan Some fixed point theorems and applications to integral-differential equations. (82d:47075)

Schumacher, Konrad Travelling-front solutions for integro-differential equations. II. (82i:35180)

Sinha, A. S. C. Special matrix solution for functional-differential systems with infinite delays. (82f:34085)

Smith, David P. The problem of persistence in economic-demographic cycles. (82m:92065)

Staffans, Olof J. A bound on the solutions of a nonlinear Volterra equation. (82j:45004)

- Stech, Harlan W. The effect of time lags on the stability of the equilibrium state of a population growth equation. (82m:92066)
- Šušar, B. A. See Kurpel', M. S., (82j:47002)
- Travis, Curtis C. See Post, Wilfred M., (82j:92056)
- Turbé, Nicole Averaging of a nonlinear integro-differential equation. (82d:34103)
- Ugoński, Henryk On a certain infinite system of semilinear evolution equations. (82c:34079)
- Velev, G. D. (with Duškov, P. N.) Approximate solution of a class of singular integro-differential equations. (Russian) (82g:65066)
- Vrabie, Ioan I. Compactness methods for an abstract nonlinear Volterra integro-differential equation. (82d:45020)
- Wheeler, Robert L. On the structure of resolvents of Volterra equations. (82h:45004)

45K05 Integro-partial differential equations

- Aizicovici, Sergiu An integro-differential equation with a discontinuous nonlinearity. (82g:45017)
- On a semilinear Volterra integro-differential equation. (82f:45010)
- Bloom, Frederick On the nonexistence of globally bounded solutions to initial-history value problems for integro-differential equations. (82m:45016)
- Burobin, A. V. (with Galkin, V. A.) Solutions of an equation of coagulation. (Russian) (82g:45018)
- D'Ambrosio, Ubratan (with Krivošein, L. E.; Mangeron, Dumitru Ion; Shimbo, Masaru) Méthode unitaire d'étude des différentes classes de problèmes "bien posés" concernant certains systèmes intégraux-différentiels non linéaires aux opérateurs polyvibrants et aux autocontrôles dans les limites d'intégration. (Spanish summary) (82c:45017)
- See also Krivošein, L. E.; et al., 82m:45018
- Datunašvili, G. A. The Cauchy problem for a parabolic type integro-differential equation with kernel depending on the difference of the arguments. (Russian. Georgian and English summaries) (82c:45019)
- The Cauchy problem for some differential and integro-differential equations of convolution type. (Russian) (82c:45011)
- Dudka, N. A. (with Šušar, B. A.) Two-sided estimates of solutions of integro-differential equations with partial derivatives of parabolic and elliptic type. (Russian) (82f:45011)
- Fitzgibbon, William E. Abstract hyperbolic integro-differential equations. (82c:45011)
- Galkin, V. A. See Burobin, A. V., 82g:45018
- Gasnov, M. G. See Muradov, R. I., 82c:45012
- Gerdžikov, V. S. (with Hristov, E. H.) Evolution equations solvable by the inverse-scattering method I. Spectral theory. (Russian. English summary) (82m:45017)
- Hristov, E. H. See Gerdžikov, V. S., 82m:45017
- Kadob'janskii, R. M. See Kozak, P. P., 82c:45011b
- Kozak, P. P. (with Kadob'janskii, R. M.) Representation of solutions for systems of linear partial integro-differential equations in the form of multiple Wiener integrals. (Russian. English summary) (82h:45011b)
- Krivošein, L. E. (with Kutanov, Alymbek; Mangeron, Dumitru Ion; D'Ambrosio, Ubratan) On a class of integro-differential equations having temporal and local autocontrols as limits of integration. (Spanish. English summary) (82m:45018)
- See also D'Ambrosio, Ubratan; et al., 82a:45017
- Kutanov, Alymbek See Krivošein, L. E.; et al., 82m:45018
- Mangeron, Dumitru Ion See D'Ambrosio, Ubratan; et al., 82a:45017 and Krivošein, L. E.; et al., 82m:45018
- Muradov, R. I. (with Gasnov, M. G.) Generalized solution of a degenerating integro-differential equation of hyperbolic type. (Russian. Azerbaijani and English summaries) (82c:45012)
- Pachpatte, B. G. On some new integral inequalities for nonselfadjoint hyperbolic partial integro-differential equations. (82c:45018)
- See also Singare, V. M., 82c:45012
- Poliščuk, V. N. (with Ptašnik, B. I.) Periodic boundary value problem for a system of integro-differential equations of hyperbolic type. (Ukrainian. Russian summary) (82f:45012)
- Ptašnik, B. I. See Poliščuk, V. N., 82f:45012
- Puzio, Zdzisław Sur un problème généralisé de Fourier pour un système d'équations intégrales-différentielles. (82m:45019)
- Santos, Rafael F. Analyse asymptotique des équations de transport dans le cas d'évolution. (English summary) [Asymptotic analysis of transport equations in the evolution case] (82i:45011)
- Schiaffino, Andrea (with Tesi, Alberto) Asymptotic stability properties for nonlinear diffusion Volterra equations. (Italian summary) (82i:45012)
- (with Tesi, Alberto) Global attractivity for diffusion delay logistic equations. (82f:45013)
- Shimbo, Masaru See D'Ambrosio, Ubratan; et al., 82a:45017
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- Šušar, B. A. See Dudka, N. A., 82f:45011
- Tesi, Alberto See Schiaffino, Andrea, 82f:45013 and 82i:45012
- secondary classifications:
- Ablowitz, Mark J. See Kodama, Yuji; et al., (82c:35071)
- Agoshkov, V. I. Differential properties of solutions of periodic problems of particle transport. (Russian) (82c:35038)
- Alexanian, Moorad Integral representation for non-Maxwellian distributions and the approach to equilibrium. (82c:82054)
- Alt, Wolfgang Singular perturbation of differential integral equations describing biased random walks. (82f:60169)
- Arthur, M. D. (with Cercignani, Carlo) Nonexistence of a steady rarefied supersonic flow in a half-space. (Italian summary) (82c:82106)
- Barnsley, M. F. (with Cornille, Henri) On a class of solutions of the Krook-Tjon-Wu model of the Boltzmann equation. (82h:82023)
- Begmatov, A. A nonlinear two-dimensional problem of non-steady-state filtration. (Russian) (82c:76063)
- Bloom, Frederick On exponential growth estimates for solutions of ill-posed integro-differential initial-history value problems. (82c:45016)
- Bobylyev, A. V. (with Potapenko, I. F.; Čujanov, V. A.) Kinetic equations of Landau type as a model of the Boltzmann equation and completely conservative difference schemes. (Russian) (82i:82036)
- Bondge, B. K. (with Pachpatte, B. G.) On some partial integral inequalities in two independent variables. (82h:26021)
- (with Pachpatte, B. G.) On two independent variable generalizations of certain integral inequalities. (82h:26011)
- Borgioli, Giovanni (with Busoni, Giorgio; Frosali, Giovanni) Strict solution of a nonlinear evolution problem in a time dependent domain. (82d:82099)
- Busoni, Giorgio See Borgioli, Giovanni; et al., (82d:82099)
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- Cornille, Henri See Barnsley, M. F., (82h:82023)
- Čujanov, V. A. See Bobylev, A. V.; et al., (82i:82036)
- Ernst, M. H. Exact solution of the nonlinear Boltzmann equation for Maxwell models. (82c:82057)
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- Ferreira, Arturo V. See Sequeira, F. M.; et al., (82d:82098)
- Fichera, Gaetano Analytic problems of materials with memory. (82j:73030)
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- Gambay, D. Applications and improvements of the summed progressing wave formalism. (82h:73019)
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- Hendriks, E. M. See Ernst, M. H., (82c:82058)
- Hludnev, A. M. Solvability of initial-boundary value problems for a weakly nonlinear system. (Russian) (82g:35106)
- A boundary value problem for a system of equations with monotone operator. (Russian) (82c:47077)
- Jakovlev, M. N. Estimates of the solutions of two-point problems for systems of first-order integro-differential equations and the method of lines. (Russian) (82h:45018)
- Jones, D. S. Note on the integral equation for a straight wire antenna. (82c:45004)
- Kaniel, Shmuel (with Shinbrot, Marvin) The Boltzmann equation. II. Some discrete velocity models. (French summary) (82c:76087)
- Kiselevskii, L. I. (with Mazurenko, S. L.) A solution of Vlasov's equation that describes a neutral current layer in the electrical drift approximation. (Russian. English summary) (82h:82058)
- Kodama, Yuji (with Satsuma, Junkichi; Ablowitz, Mark J.) Nonlinear intermediate long-wave equation: analysis and method of solution. (82c:35071)
- Larsen, Edward W. Bounds and maximum principles for the solution of the linear transport equation. (82f:82073)
- Makašev, N. K. (with Nosik, V. I.) Steady-state Couette flow (with heat transfer) of a gas of Maxwell molecules. (Russian) (82h:82046)
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- Oliveira, J. S. See Sequeira, F. M.; et al., (82d:82098)
- Pachpatte, B. G. See Bondge, B. K., (82h:26021) and (82h:26011)
- Pao, C. V. Asymptotic behavior of neutron transport in a slab with moving boundaries. (82c:82111)
- Petry, K. H. See Neunzert, H., (82c:76114)
- Potapenko, I. F. See Bobylev, A. V.; et al., (82i:82036)
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- Santos, Rafael F. Sur l'approximation de diffusion de la solution de l'équation de transport. (English summary) [Diffusion approximation of the solution of the transport equation] (82j:82073)
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- Sequeira, F. M. (with Oliveira, J. S.; Ferreira, Arturo V.) Étude de l'équation de Boltzmann du transport de neutrons. I. (82d:82098)
- Shinbrot, Marvin See Kaniel, Shmuel, (82c:76087)
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- Vrabie, Ioan I. The nonlinear version of Pazy's local existence theorem. (82a:47064)

45Lxx Approximation of solutions

45L05 Theoretical approximation of solutions

- Begmatov, A. Approximation of solutions of a countable system of nonlinear integral equations by solutions of corresponding truncated systems. (Russian) (82j:45011)
- Berikelašvili, G. K. (with Pavlenišvili, G. D.) Approximate solution of certain systems of nonlinear Volterra integral equations of the second kind. (Russian. Georgian and English summaries) (82a:45019)
- Bownds, John M. (with Wood, Bruce) A smoothed projection method for singular, nonlinear Volterra equations. (82j:45012)
- Ch'en, Hung I Successive approximations for solutions of functional integral equations. (82c:45013)

- Elliott, David A convergence theorem for singular integral equations. **82m:45020**
- Gasanov, G. M. Convergence of the collocation method for integral equations. (Russian. Azerbaijani and English summaries) **82k:45012**
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- Jen, Erica (with Srivastav, R. P.) Cubic splines and approximate solution of singular integral equations. **82a:45021**
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- Lučka, A. Ju. (with Tukalevs'ka, N. I.) An iteration-projection method of solution of integral equations, based on the collocation method. (Russian) (See **82e:68011**)
- Masson, D. Moment problem approximants to the Chandrasekhar H -equation. **82e:45014**
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- Saadabaev, A. Approximate solution of a Fredholm integral equation of the first kind in the space of continuous functions. (Russian) **82k:45013**
- Schäfer, E. Spectral approximation for compact integral operators by degenerate kernel methods. **82e:45018**
- Schmidt, Günter See Prössdorf, Siegfried, **82m:45022**
- Seituk, V. N. See Zolotarevskii, V. A., **82m:45023**
- Silbermann, Bernd (with Rost, Karla) Das Reduktionsverfahren für eine Klasse ausgearbeiteter Integralgleichungen. **82i:45013**
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- Tukalevs'ka, N. I. See Lučka, A. Ju., (See **82e:68011**)
- Wood, Bruce See Bownes, John M., **82j:45012**
- Zolotarevskii, V. A. (with Seituk, V. N.) The collocation method of solving singular integral equations defined on a Ljapunov contour of integration. (Russian) **82m:45023** (with Njaga, V. I.) Approximate solution of a singular integral equation with shift. (Russian) **82m:45024**
- secondary classifications:
- Abdullaeva, G. G. (with Musaeu, B. I.) Regularization of a singular integral along an open contour. (Russian) **(82j:45005)**
- Adeev, A. V. (with Mel'nicenko, A. S.) Linearization of the energy equation when it is simultaneously solved with the equation of radiative transfer. (Russian) **(82d:85008)**
- Adhikari, Sadhan K. Alternative to Padé technique for iterative solution of integral equations. **(82k:65078)**
- Aliiev, B. (with Sobirov, M.) Uniform convergence of the regularization method for systems of integral equations on a spectrum. (Russian) (See **82m:34002**)
- Atdaev, S. On the convergence of some methods of two-sided approximations for Volterra integro-differential equations. (Russian. Turkmen and English summaries) **(82i:45004)**
- Berković, V. N. On a theory for a class of integral equations that arise in mixed problems of elasticity. (Russian) **(82j:73010)**
- Bilenko, V. I. Approximation by polynomials of solutions of a class of integral Hammerstein equations. (Russian) **(82e:65131)**
- Cattapan, G. (with Lovitch, L.; Vanzani, V.) Minimally connected N -body equations for transition operators. **(82i:81130)**
- Dudučava, R. V. Solution of a convolution equation on a quadrant. (Russian) **(82a:45009)**
- Gul'ka, S. S. A projective-iterative method for finding periodic solutions of nonlinear systems of integro-differential equations with impulse action. (Russian) **(82i:45006)**
- Lifanov, I. K. Ill-posedness and regularization of the numerical solution of singular integral equations of the first kind. (Russian) **(82e:45008)**
- Lovitch, L. See Cattapan, G.; et al., **(82i:81130)**
- Lučka, A. Ju. ★Проектно-итерационные методы решения дифференциальных и интегральных уравнений. (Russian) [Projective-iterative methods for solving differential and integral equations] **(82e:65001)**
- The rate of convergence of the projection-iteration method for integral equations. (Russian) **(82e:65134)**
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- Mel'nicenko, A. S. See Adeev, A. V., **(82d:85008)**
- Musaeu, B. I. See Abdullaeva, G. G., **(82j:45005)**
- Năslău, P. On an integro-differential equation. (Romanian. English summary) **(82k:45010)**
- Pedas, A. Piecewise linear approximation of the solution of an integral equation with a logarithmic singularity in the kernel. (Russian. English summary) **(82b:45009)**
- Prusov, I. A. (with Savenkov, V. A.) Integral equation of a contact problem of elasticity theory for an isotropic band. (Russian) **(82k:73076)**
- Pyhtee, G. N. A case of convergence of the iteration method and its application in the theory of jets. (Russian) **(82c:47074)**
- Savenkov, V. A. See Prusov, I. A., **(82k:73076)**
- Schneider, Claus Product integration for weakly singular integral equations. **(82c:65090)**
- Šesko, M. A. (with Mastjanica, V. S.) A solution of a two-dimensional singular integral equation of the first kind. (Russian. English summary) **(82c:45009)**
- Siewert, C. E. On computing eigenvalues in radiative transfer. **(82c:85003)**
- On the equation of transfer relevant to the scattering of polarized light. **(82g:85008)**
- Simonneau, E. Transfert de rayonnement dans les atmosphères étendues. **(82g:85009)**
- Singh, Peetam A note on the solution of two-dimensional Volterra integral equation by splines. **(82d:45002)**
- Šepakov, L. N. See Tivončuk, V. I., **(82f:65140)**
- Sobirov, M. See Aliiev, B., (See **82m:34002**)
- Tivončuk, V. I. (with Šepakov, L. N.) Numerical-analytic method for solving systems of linear Volterra integral equations. (Russian) **(82f:65140)**
- Vanzani, V. See Cattapan, G.; et al., **(82i:81130)**
- 45L10 Numerical approximation of solutions {For numerical analysis, see 65R20.}
- Mastjanica, V. S. See Šesko, M. A., **82d:45018**
- Šesko, M. A. (with Mastjanica, V. S.) Approximate solution of singular integral equations by the degenerate kernel method. (Russian) **82d:45018**
- Volohin, V. A. Approximate solution of multidimensional weakly singular and singular integral equations. (Russian) **82g:45019**
- Wood, Bruce Observations on the combined recursive collocation and kernel approximation technique for solving Volterra integral equations. **82d:45019**
- secondary classifications:
- Anderssen, R. S. (with Prenter, P. M.) A formal comparison of methods proposed for the numerical solution of first kind integral equations. **(82h:65094)**
- Anselone, P. M. Singularity subtraction in the numerical solution of integral equations. **(82h:65095)**
- Bozeman, Sylvia T. (with Kramarz, Luis) Finite rank modifications and generalized inverses of Fredholm operators. **(82c:47017)**
- Brunner, H. See McKee, Sean, **(82g:65064)**
- Bykov, A. A. A numerical method for solving multidimensional integral equations. (Russian) **(82h:78014)**
- Cahlon, Baruch See Westreich, David, **(82a:65101)**
- Chatelin-Laborde, Françoise (with Lebbar, Rachid) The iterated projection solution for the Fredholm integral equation of second kind. **(82h:65096)**
- Clements, David L. (with Jones, Oscar A. C.) The boundary integral equation method for the solution of a class of problems in anisotropic elasticity. **(82h:73018)**
- Danišević, V. P. Application of polynomial splines to approximate the solution of nonlinear singular integral equations. (Russian) **(82k:65081)**
- Djouna, Mohamed A method of calculation of lifting flows around 2-dimensional corner-shaped bodies. **(82c:76011)**
- Dudučava, R. V. Solution of a convolution equation on a quadrant. (Russian) **(82a:45009)**
- Freasier, B. C. (with Isbister, D. J.) A remark on the Percus-Yevick approximation in higher dimensions. Hard core systems. **(82d:82066)**
- Fuglede, Bent On a direct method of integral equations for solving the biharmonic Dirichlet problem. (German and Russian summaries) **(82m:31009)**
- Graham, Ivan G. Collocation methods for two-dimensional weakly singular integral equations. **(82h:65099)**
- Ioakimidis, Nikolaos I. On the weighted Galerkin method of numerical solution of Cauchy type singular integral equations. **(82c:65083)**
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- Jones, Oscar A. C. See Clements, David L., **(82h:73018)**
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- McKee, Sean (with Brunner, H.) The repetition factor and numerical stability of Volterra integral equations. **(82g:65064)**
- O'Leary, Dianne Prost (with Simmons, John A.) A bidiagonalization-regularization procedure for large scale discretizations of ill-posed problems. **(82k:65020)**
- Prenter, P. M. See Anderssen, R. S., **(82h:65094)**
- Rizzo, F. J. (with Shiply, D. J.) The boundary integral equation method with application to certain stress concentration problems in elasticity. **(82h:73016)**
- Saadabaev, A. Regularization of solutions of an integral equation of the first kind with an approximately given kernel and right-hand side. (Russian) **(82k:45001)**
- Shiply, D. J. See Rizzo, F. J., **(82h:73016)**
- Simmons, John A. See O'Leary, Dianne Prost, **(82k:65020)**
- Uba, P. See Vainikko, G., **(82h:65100)**
- Vainikko, G. (with Uba, P.) A piecewise polynomial approximation to the solution of an integral equation with weakly singular kernel. **(82h:65100)**
- Wardle, Leigh J. The direct boundary integral method for potential theory and elasticity. **(82d:35016)**
- Westreich, David (with Cahlon, Baruch) Numerical solutions of Volterra integral equations with continuous or discontinuous terms. **(82a:65101)**
- 45L99 None of the above, but in this section
- Werbowski, Jarosław On some asymptotic behaviour of solution of a Volterra integral equation with delay. **82c:45019**
- 45Mxx Qualitative behavior
- 45M05 Asymptotics
- Baillon, Jean-Bernard (with Clément, Ph.) Ergodic theorems for nonlinear Volterra equations in Hilbert space. **82k:45014**
- Clément, Ph. See Baillon, Jean-Bernard, **82h:45014**
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- Pedas, A. See Vainikko, G., **82i:45014**
- Soni, K. (with Soni, Raj P.) On the asymptotic behavior of the solution of a nonlinear Volterra integral equation. **82g:45020**
- (with Soni, Raj P.) Asymptotic solution to a class of nonlinear Volterra integral equations. **82g:45021**
- Soni, Raj P. See Soni, K., **82g:45020** and **82g:45021**
- Vainikko, G. (with Pedas, A.) The properties of solutions of weakly singular integral equations. **82d:45014**

secondary classifications:

- Cattapan, G. (with Lovitch, L.; Vanzani, V.) Minimally connected N -body equations for transition operators. (82c:81130)
 Gripenberg, Gustaf Periodic solutions of an epidemic model. (82d:92023)
 Kuschner, Henry E. Properties of solutions to integral master equations for closed and open stellar systems. (82b:85005)
 Leitman, M. J. An integro-differential equation for plane waves propagating into a random fluid: asymptotic behavior. (82g:45016)
 Lovitch, L. See Cattapan, G.; et al., (82i:81130)
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45M10 Stability theory

- Corduneanu, C. Frequency domain criteria for nuclear reactor stability. 82i:45015
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- Bennett, John B. Total stability for a Volterra integral equation. (82g:45005)
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 Staffans, Olaf J. A priori bounds for a discontinuous Volterra equation. (82j:45003)

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- Yin, Yong Quan The integral equation $\varphi(x) = \int_0^{L-x} \varphi(x+y) dF(y)$. (Chinese. English summary) 82k:45013

secondary classifications:

- Bondge, B. K. (with Pachpatte, B. G.) On some fundamental integral inequalities in n independent variables. (82i:26010)
 Iskandarov, S. See Več, Ju. A., (82m:45015)
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- Angelov, V. G. (with Bainov, D. D.) Existence and uniqueness of the global solution of certain integral-functional equations. (Russian) 82c:45015
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 Rennolet, Charles Existence and boundedness results for abstract nonlinear Volterra equations of nonconvolution type. 82g:45024
 Schiaffino, Andrea (with Tesi, Alberto) On the asymptotic stability for abstract Volterra integro-differential equations. (Italian summary) 82g:45025
 Szulfa, Stanisław On infinite systems of Volterra integral equations in Banach spaces. 82h:45021

Teodorescu, Veronica Un théorème d'existence pour une équation intégrale multivoque. 82a:45023

- Tesi, Alberto See Schiaffino, Andrea, 82g:45025
 Tsuruta, Kunio On linear integro-differential equations in a Banach space. 82g:45026
 Verma, R. U. Algebraic Fredholm type solutions of integral equations $(I + \mathcal{U}/H)x = x_0$ in Banach spaces. 82k:45015
 Vrabie, Ioan I. Compactness methods for an abstract nonlinear Volterra integro-differential equation. 82d:45020
 Zahariev, Andrei (with Zlatev, Stojan) A generalization of the Cauchy problem for nonlinear integro-differential equations in a Banach space. (Bulgarian. Russian and English summaries) 82h:45018
 (with Bainov, D. D.; Filev, S. G.) On a class of nonlinear integro-differential equations in a Banach space. (Bulgarian. Russian and English summaries) 82g:45027
 Zlatev, Stojan See Zahariev, Andrei, 82h:45018

secondary classifications:

- Aizikovici, Sergiu An integro-differential equation with a discontinuous nonlinearity. (82g:45017)
 Becker, Ronald I. Existence of solutions of Hammerstein equations of compact type. (82c:47076)
 Cartier, Pierre Une étude des covariances mesurables. (English summary) [A study of measurable covariances] (82m:60040)
 Ch'en, Hung I Successive approximations for solutions of functional integral equations. (82m:45013)
 Clément, Ph. On abstract Volterra equations with kernels having a positive resolvent. (82a:45008)
 Filin, V. A. On the existence of nonzero fixed points of nonlinear operators. (Russian. Tajiki summary) (82g:47039)
 Kravvaritis, Dimitrios Nonlinear random operators of monotone type in Banach spaces. (82c:60116)
 Marx, B. (with Vogel, J.) Analytizitätseigenschaften der Lösungen nichtlinearer Operatorgleichungen vom Hammerstein-Typ und rekursive Bestimmung ihrer Lösung. (English and Russian summaries) (82f:58033)
 Mawhin, Jean (with Willem, Michel) Range of nonlinear perturbations of linear operators with an infinite-dimensional kernel. (82c:47081)
 Phan Van Chu'o'ng Sur l'existence de sections séparément mesurables et séparément absolument continues d'une application multivoque. Applications aux équations intégrales multivoques. (82e:28013)
 Raynal, Marie-Lise Homogénéisation d'un problème de diffusion non linéaire du type de Volterra. (English summary) (82f:49039)
 Turó, Jan On a nonlinear random functional integral equation in two independent variables. (Serbo-Croatian summary) (82k:60137)
 Vogel, J. See Marx, B., (82f:58033)
 Willem, Michel See Mawhin, Jean, (82c:47081)

45P05 Integral operators [See also 47Axx, 47Bxx, 47G05.]

- Baba-Zade, M. A. Direct and inverse estimate for an integral with a parameter along a closed contour. (Russian) 82d:45021
 Bahtin, I. A. A. I. Nekrasov's equation of waves on the surface of a heavy fluid. (Russian) 82m:45027
 Bhise, V. M. (with Sarojini, K.) On a new class of integral operators. 82a:45024
 Costabel, Martin An inverse for the Gohberg-Krupnik symbol map. 82a:45025
 Kapanadze, R. V. Some properties of integral operators. (Russian. Georgian and English summaries) 82h:45019
 Korpaev, K. On an integral operator. (Russian) 82f:45014
 Malamud, M. M. Spectral analysis of Volterra operators with a kernel depending on the difference between arguments. (Russian) 82h:45020
 Oinarov, R. (with Otelbaev, M. O.) A contractibility criterion for the Uryson operator. (Russian) 82c:45023
 Otelbaev, M. O. See Oinarov, R., 82c:45023
 Rubin, B. S. Noether's theory for generalized Abel equations with a real index. (Russian) 82c:45017
 Sarojini, K. See Bhise, V. M., 82a:45024

secondary classifications:

- Antonevič, A. B. Invertibility conditions for operators with a convex rationally independent system of shifts. (Russian) (82h:47030)
 Bogorodskaja, T. E. Density of states of almost periodic and random integral operators. (Russian. English summary) (82c:47066)
 Bykadorov, Ju. A. Normal solvability of integro-differential operators. (Russian) (82c:47067)
 Duduhava, R. V. On the index of bisingular integral operators. I. (Russian) (82e:47040a)
 On the index of bisingular integral operators. II. (Russian) (82e:47040b)
 Garadžev, A. G. A generalized singular equation with various singular operators. (Russian) (82d:47018)
 Gretskey, N. E. (with Uhl, J. J., Jr.) Carleman and Korotkov operators on Banach spaces. (82i:47044)
 Gripenberg, Gustaf On some positive definite forms and Volterra integral operators. (82g:45006)
 Heinloo, M. The algebra of fractional rational functions and its application in problems of viscoelasticity. (Russian. Estonian and English summaries) (82j:73034)
 Hromov, A. P. Equiconvergence of expansions in eigen- and associated functions of integral operators. (Russian) (82i:47006)
 Javřan, V. A. Asymptotic behavior of eigenvalues and the trace of some integral operators. (Russian. Armenian and English summaries) (82e:47027)
 Jurkat, W. B. (with Sampson, G.) The L^p mapping problem for well-behaved convolutions. (82c:47063)

- Korotkov, V. B. Some properties of B -integral operators in L_2 . (Russian) (82b:47064)
Unitary equivalence of linear operators to bi-Carleman integral operators. (Russian) (82m:47021)
- de Korvin, André (with Roberts, Charles E., Jr.) Double adjoints of Hammerstein functionals defined on continuous functions. (82f:47081)
- Kozłowski, Wojciech M. Nonlinear operators in Banach function spaces. (82k:47083)
- Kráľ, Josef ★Integral operators in potential theory. (82b:31010)
- Kresin, G. I. On the essential norm of an integral operator of the double layer of the couple-stress theory of elasticity. (Russian. Georgian and English summaries) (82k:73006)
- Malamud, M. M. The spectrum of one-dimensional perturbations of Volterra operators. (Russian. English summary) (82b:47065)
- Mihlin, S. G. (with Prössdorf, Siegfried) ★Singuläre Integraloperatoren. (German) [Single integral operators] (82c:45002)
- Oinarov, R. Criterion for boundedness and compactness of a class of Uryson integral operators. (Russian) (82c:47064)
On properties of the Uryson operator. (Russian) (82b:47066)
- Oročko, Ju. B. Some properties of expansions in generalized eigenfunctions of Carleman selfadjoint operators. (Russian) (82c:47030)
- Pragarauskas, H. On the limit transition in degenerate Bellman equations. (Russian. Lithuanian and English summaries) (82d:47052)
- Prössdorf, Siegfried See Mihlin, S. G., (82c:45002)
- Roberts, Charles E., Jr. See de Korvin, André, (82f:47081)
- Rodino, Luigi Polysingular integral operators. (82f:47060)
- Sampson, G. See Jurkat, W. B., (82c:47063)
- Sazonov, L. I. Normal solvability of bisingular operators. (Russian) (82c:47042)
- Schachermayer, Walter (with Weis, Lutz) Almost compactness and decomposability of integral operators. (82f:47062)
- Schep, A. R. Compactness properties of an operator which imply that it is an integral operator. (82f:47068)
- Sleeman, B. D. Acoustic scattering by inhomogeneous media. (82c:76090)
- Soldatov, A. P. On the Noether theory of operators. One-dimensional singular integral operators of classical type. (Russian) (82c:47047)
Algebra of singular integral operators with shift-contraction on the half line. (Russian) (82f:47063)
- Uhl, J. J., Jr. See Gretskey, N. E., (82f:47044)
- Vasilevskii, N. L. On an algebra generated by two-dimensional integral operators with continuous coefficients in a subdomain of the unit disc. (82c:47044)
Banach algebras that are generated by certain two-dimensional integral operators. I. (Russian) (82d:47053)
- Weis, Lutz See Schachermayer, Walter, (82f:47062)

46-XX FUNCTIONAL ANALYSIS [For manifolds modeled on topological linear spaces, see 57N20, 58Bxx.]

46-01 Elementary exposition, textbooks

- Akilov, G. P. (with Djatlov, V. N.) ★Основы математического анализа. (Russian) [Foundations of mathematical analysis] 82c:46001
- Balakrishnan, A. V. ★Прикладной функциональный анализ. (Russian) [Applied functional analysis] 82i:46001
- (Blagodatskii, V. I.) See Balakrishnan, A. V., 82c:46001
- Djatlov, V. N. See Akilov, G. P., 82c:46001
- Egle, Kuno ★Elemente der Funktionalanalysis. (German) [Elements of functional analysis] 82c:46001
- Packel, Edward W. ★Functional analysis. 82a:46001
- Roubine, E. ★Théorie des distributions. (French) [Theory of distributions] 82h:46001
- Trenogin, V. A. ★Функциональный анализ. (Russian) [Functional analysis] 82k:46001
- Yosida, Kōsaku ★Functional analysis. 82i:46002

secondary classifications:

- Ahieser, N. I. (with Glazman, I. M.) ★Теория линейных операторов в Гильбертовом пространстве. Том I. (Russian) [Theory of linear operators in Hilbert space. Vol. I] (82g:47001a)
(with Glazman, I. M.) ★Теория линейных операторов в Гильбертовом пространстве. Том II. (Russian) [Theory of linear operators in Hilbert space. Vol. II] (82g:47001b)
- (Aron, Richard M.) See Nachbin, Leopoldo, (82f:58002)
- Balakrishnan, A. V. ★Applied functional analysis. (82c:46094)
- Efimov, A. V. (with Zolotarev, Ju. G.; Terpigoreva, V. M.) ★Математический анализ (специальные разделы). Часть II. (Russian) [Mathematical analysis (special sections). Part II] (82k:00001b)
- Fenyő, István ★Moderne mathematische Methoden in der Technik. Band 3. (German) [Modern mathematical methods in engineering. Vol. 3] (82j:00024)
- Friedrichs, Kurt Otto ★Spectral theory of operators in Hilbert space. (82j:47001)
- Glazman, I. M. See Ahieser, N. I., (82g:47001a) and (82g:47001b)
- Herget, Charles J. See Michel, Anthony N., (82k:00003)
- (Lepa, Eugene) See Maurin, Krzysztof, (82i:00003)
- Maurin, Krzysztof ★Analysis. Part II. (82i:00003)
- Michel, Anthony N. (with Herget, Charles J.) ★Mathematical foundations in engineering and science. (82k:00003)
- Nachbin, Leopoldo ★Introduction to functional analysis: Banach spaces and differential calculus. (82f:58002)
- Terpigoreva, V. M. See Efimov, A. V.; et al., (82k:00001b)
- Zolotarev, Ju. G. See Efimov, A. V.; et al., (82k:00001b)

46-02 Advanced exposition (research surveys, monographs, etc.)

- Cristescu, Romulus Use of order structures in some functional analytic researches. (Romanian) 82c:46002

- Floret, Klaus ★Weakly compact sets. 82b:46001
- (Havin, V. P.) See Investigations on linear operators and the theory of functions. 82c:46002
- (Hruščev, S. V.) See Investigations on linear operators and the theory of functions. 82c:46002
- (Nikol'skii, N. K.) See Investigations on linear operators and the theory of functions. 82c:46002
- Complex analysis ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] 82c:46002
- Function theory ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] 82c:46002
- Investigations on linear operators and the theory of functions ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] 82c:46002
- Linear analysis ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] 82c:46002
- Problems: Linear and complex analysis ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] 82c:46002

secondary classifications:

- Balakrishnan, A. V. ★Прикладной функциональный анализ. (Russian) [Applied functional analysis] (82i:46001)
- Bergh, Jöran (with Löfström, Jörgen) ★Интерполяционные пространства. (Russian) [Interpolation spaces] (82c:46083)
- Björk, J.-E. ★Rings of differential operators. (82g:32013)
- (Blagodatskii, V. I.) See Balakrishnan, A. V., (82c:46001)
- Bridges, Douglas S. ★Constructive functional analysis. (82k:03094)
- Buhvalov, A. V. (with Veksler, A. I.; Geiler, V. A.) Normed lattices. (Russian) (82b:46019)
- Geiler, V. A. See Buhvalov, A. V.; et al., (82b:46019)
- (Goldin, Gerald A.) See Measure theory and its applications, (82g:28002)
- Heinrich, Stefan Ultraproducts in Banach space theory. (82c:46013)
- (Kruščev, S. V.) See Bergh, Jöran; et al., (82c:46083)
- (Lizorkin, P. I.) See Bergh, Jöran; et al., (82c:46083)
- Löfström, Jörgen See Bergh, Jöran, (82c:46083)
- Schaefer, H. H. Aspects of Banach lattices. (82g:46048)
- Singer, Ivan ★Bases in Banach spaces. II. (82k:46024)
- Veksler, A. I. See Buhvalov, A. V.; et al., (82b:46019)
- (Wheeler, Robert F.) See Measure theory and its applications, (82g:28002)
- Conference: Measure Theory and its Applications ★Measure theory and its applications. (82g:28002)
- DeKalb, III. ★Measure theory and its applications. (82g:28002)
- Measure theory and its applications ★Measure theory and its applications. (82g:28002)

46-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (Beimakov, I. G.) See History and methodology of the natural sciences, (82c:01004)
- Combes, Alain von Neumann algebras. (82f:46067)
- (Denjoy, Arnaud) See Correspondence: Lévy, Paul, (82g:01034)
- (Fréchet, Maurice) See Correspondence: Lévy, Paul, (82g:01034)
- Gorin, E. A. G. E. Šilov's investigations in the theory of commutative Banach algebras and their subsequent development. (Russian) (82a:46047)
- (Helly, Eduard) See Hochstadt, Harry, (82c:01090a)
- Hochstadt, Harry Eduard Helly, father of the Hahn-Banach theorem. (82c:01090a)
See also Monna, A. F., (82c:01090b)
- (Kumugui, Kinjirō) See Okano, Hatsuō, (82f:01067)
- (Lévy, Paul) See Correspondence: Lévy, Paul, (82g:01034)
- Monna, A. F. Letter: "Eduard Helly, father of the Hahn-Banach theorem" by Hochstadt. (82c:01090b)
- Okano, Hatsuō Professor Kinjirō Kunugi's work and its developments on the theory of integration. (82f:01067)
- (Ostrowski, Alexander) See Correspondence: Lévy, Paul, (82g:01034)
- (Rybníkov, K. A.) See History and methodology of the natural sciences, (82c:01004)
- (Šilov, G. E.) See Gorin, E. A., (82a:46047)
- (Tjulin, I. A.) See History and methodology of the natural sciences, (82c:01004)
- Biography: Helly, Eduard See Hochstadt, Harry, (82c:01090a)
- Correspondence: Lévy, Paul Lettres à Paul Lévy. (82g:01034)
- History and methodology of the natural sciences ★История и методология естественных наук. Вып. XXV. (Russian) [History and methodology of the natural sciences. No. XXV] (82c:01004)
- Natural sciences ★История и методология естественных наук. Вып. XXV. (Russian) [History and methodology of the natural sciences. No. XXV] (82c:01004)

46-04 Explicit machine computation and programs (not the theory of computation or programming)

46-06 Proceedings, conferences, etc.

- (Gähler, Siegfried) See Convergence structures and applications to analysis, 82d:46001
- (Gähler, Werner) See Convergence structures and applications to analysis, 82d:46001
- (Graves, William H.) See Proceedings: Conference on Integration, Topology, and

- Geometry in Linear Spaces.** 82c:46003
- (Havin, V. P.) See *Complex analysis and spectral theory*, 82m:46001
- (Kneis, Gert) See *Convergence structures and applications to analysis*, 82d:46001
- (Machado, Silvio) See *Functional analysis, holomorphy, and approximation theory*, 82c:46003
- (Nikol'skii, N. K.) See *Investigations on linear operators and the theory of functions*, 82c:46002 and *Complex analysis and spectral theory*, 82m:46001
- (Nikol'skii, S. M.) See *Studies in the theory of differentiable functions of several variables and its applications*, 82c:46004
- Approximation theory** ★Functional analysis, holomorphy and approximation theory. 82c:46003
- Chapel Hill, N.C.** ★Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces. 82c:46003
- Complex analysis and spectral theory** ★Complex analysis and spectral theory. 82m:46001
- Conference:**
- Integration, Topology, and Geometry in Linear Spaces** ★Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces. 82c:46003
- Convergence structures and applications to analysis** ★Convergence structures and applications to analysis. 82d:46001
- Frankfurt a.d. Oder** ★Convergence structures and applications to analysis. 82d:46001
- Functional analysis, holomorphy, and approximation theory** ★Functional analysis, holomorphy and approximation theory. 82c:46003
- Geometry** ★Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces. 82c:46003
- Holomorphy** ★Functional analysis, holomorphy and approximation theory. 82c:46003
- Investigations on linear operators and the theory of functions** ★Исследования по линейным операторам и теории функций. XI (Russian) [Investigations on linear operators and the theory of functions. XI] 82c:46002
- Leningrad** ★Complex analysis and spectral theory. 82m:46001
- Linear differential equations** ★Microfunctions and linear differential equations. VII. (Japanese) 82d:46002
- Microfunctions and linear differential equations** ★Microfunctions and linear differential equations. VII. (Japanese) 82d:46002
- Operator algebras and their applications** ★Operator algebras and their applications. (Japanese) 82b:46002
- Proceedings:**
- Conference on Integration, Topology, and Geometry in Linear Spaces** ★Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces. 82c:46003
- Rio de Janeiro** ★Functional analysis, holomorphy and approximation theory. 82c:46003
- Seminar:**
- Complex Analysis and Spectral Theory** ★Complex analysis and spectral theory. 82m:46001
- Functional Analysis, Holomorphy, and Approximation Theory** ★Functional analysis, holomorphy and approximation theory. 82c:46003
- Studies in the theory of differentiable functions of several variables and its applications** ★Исследования по теории дифференцируемых функций многих переменных и ее приложениям. VIII. (Russian) [Studies in the theory of differentiable functions of several variables and its applications. VIII] 82c:46004
- Summer School:**
- Convergence Structures and Applications to Analysis** ★Convergence structures and applications to analysis. 82d:46001
- Symposium:**
- Microfunctions and Linear Differential Equations** ★Microfunctions and linear differential equations. VII. (Japanese) 82d:46002
- Operator Algebras and their Applications** ★Operator algebras and their applications. (Japanese) 82b:46002
- Topology** ★Proceedings of the Conference on Integration, Topology, and Geometry in Linear Spaces. 82c:46003
- secondary classifications:**
- (Klis, Czeslaw) See *Proceedings: Conference on Convergence*, (82k:54001)
- (Nachbin, Leopoldo) See *Mathematical analysis and applications*, (82i:00014a) and (82i:00014b)
- (Orlicz, Wladyslaw) See *Special issue: Orlicz, Wladyslaw*, (82h:00005)
- (Schwartz, Laurent) See *Mathematical analysis and applications*, (82i:00014a) and (82i:00014b)
- (Weron, Aleksander) See *Probability theory on vector spaces*, (82d:60004)
- Analyse harmonique** ★Analyse harmonique. (French) [Harmonic analysis] (82k:43001)
- Asterisque** ★Representation theorems for Hardy spaces. (82a:32001)
- Birthday:**
- Orlicz, Wladyslaw** ★Special issue dedicated to Wladyslaw Orlicz on the occasion of his seventy-fifth birthday. (82h:00005)
- Schwartz, Laurent** ★Mathematical analysis and applications. Part A. (82i:00014a) ★Mathematical analysis and applications. Part B. (82i:00014b)
- Blażejewko** ★Probability theory on vector spaces. II. (82d:60004)
- Conference:**
- Convergence** ★Proceedings of the Conference on Convergence. (82k:54001)
- Probability Theory on Vector Spaces** ★Probability theory on vector spaces. II. (82d:60004)
- Functional analysis** ★Special issue dedicated to Wladyslaw Orlicz on the occasion of his seventy-fifth birthday. (82h:00005)
- Harmonic analysis** ★Analyse harmonique. (French) [Harmonic analysis] (82k:43001)
- Hyperfunctions and linear differential equations** ★Hyperfunctions and linear differential equations. VI. (Japanese) (82d:35009)
- Linear differential equations** ★Hyperfunctions and linear differential equations. VI. (Japanese) (82d:35009)
- Mathematical analysis and applications** ★Mathematical analysis and applications. Part A. (82i:00014a) ★Mathematical analysis and applications. Part B. (82i:00014b)
- Probability theory on vector spaces** ★Probability theory on vector spaces. II. (82d:60004)

Proceedings:

- Conference on Convergence** ★Proceedings of the Conference on Convergence. (82k:54001)
- Representation theorems for Hardy spaces** ★Representation theorems for Hardy spaces. (82a:32001)
- Special issue:**
- Orlicz, Wladyslaw** ★Special issue dedicated to Wladyslaw Orlicz on the occasion of his seventy-fifth birthday. (82h:00005)
- Symposium:**
- Hyperfunctions and Linear Differential Equations** ★Hyperfunctions and linear differential equations. VI. (Japanese) (82d:35009)
- Saczzyrk** ★Proceedings of the Conference on Convergence. (82k:54001)
- Vector spaces** ★Probability theory on vector spaces. II. (82d:60004)

46Axx Topological linear spaces

46A05 Locally convex spaces

- Ansemil, J. M.** (with Ponte, S.) An example of a quasinormable Fréchet function space which is not a Schwartz space. 82i:46004
- Brodsky, I.** Preservation of closure in a locally convex space. I. 82c:46004
- Dierolf, Susanne** (with Floret, Klaus) Über die Fortsetzbarkeit stetiger Normen. 82g:46001
- A note on the lifting of linear and locally convex topologies on a quotient space. 82i:46003
- Floret, Klaus** See *Dierolf, Susanne*, 82g:46001
- Le Van Hot** On the embedding theorem. 82c:46005
- Müller, Bernd** Strict topologies and the continuous convergence structures. 82g:46002
- Otto, Christoph** Approximation properties of locally convex spaces. 82d:46003
- Papaghic, Neculai** Sur la topologie raffinée d'un espace localement convexe. 82d:46004
- Ponte, S.** See *Ansemil, J. M.*, 82i:46004
- Rodriguez-Salinas, Baltasar** On the Dieudonné-Grothendieck theorem. Necessary and sufficient conditions. (Spanish. English summary) 82k:46002
- Tsirlinikov, Bella** Remarkable hyperplanes in locally convex spaces of dimension at most c . 82i:46003
- Wilansky, Albert** Mazur spaces. 82f:46001

secondary classifications:

- Feldman, W. A.** See *Porter, J. F.*, (82b:46003)
- Floret, Klaus** On the sum of two closed convex sets. (82h:52007)
- Ludwig, Klaus** Eigenschaften topologischer Gruppen von Lie-Reihen. [Characteristics of topological groups of Lie series] (82k:22001)
- Nguyen To Nhu** On the extensions of uniformly continuous mappings. (82h:54019)
- Porter, J. F.** (with Feldman, W. A.) Convergence structures for operators. (82i:46003)
- Zadernan, V. G.** Bounds and quasi-interior points of complex sets in a locally convex space. (Russian) (82j:52005)

46A06 Metrizable topological linear spaces and their duals (F-, DF-spaces, etc.)

- Dragilev, M. M.** (with Oleinikov, A. H.) Continuable absolute bases in F -spaces. (Russian) 82d:46005
- Kalton, N. J.** Curves with zero derivative in F -spaces. 82a:46002
- Oleinikov, A. H.** See *Dragilev, M. M.*, 82d:46005
- Pavlovic, Miroslav** A theorem on metrization of a locally convex space. (Russian) 82c:46006
- Peck, N. Tenney** Banach-Mazur distances and projections on p -convex spaces. 82i:46005
- Riley, Charles** A note on strict convexity. 82i:46006

secondary classifications:

- Bayoumi, Aboubakr** Bounding subsets of some metric vector spaces. (82j:46058)
- Kim, Jongsik** Openness of surjective continuous linear mappings. (82c:46006)
- Pechanec-Drahoš, Jaroslav** Sheaves of Fréchet spaces. (82d:46097)
- Valdivia, Manuel** A representation of the space $\mathcal{D}(K)$. (82j:46052)

46A07 Barreled spaces

- Cobzaş, Stefan** (with Muntean, Ioan) Condensation of singularities and divergence results in approximation theory. 82c:46004
- De Wilde, Marc** (with Tsirlinikov, Bella) Barreled spaces with a B -complete completion. 82c:46007
- Donegan, H. A.** (with McMaster, T. B. M.) Concerning the "panneau" of M. Sova. 82g:46003
- Kadelburg, Zoran** On some classes of linear topological spaces. 82j:46001a
- On some classes of linear topological spaces. II. 82j:46001b
- McMaster, T. B. M.** See *Donegan, H. A.*, 82g:46003
- Muntean, Ioan** See *Cobzaş, Stefan*, 82c:46004
- Pérez Carreras, Pedro** See *Valdivia, Manuel*, 82m:46002
- Radosavljević, Mirjana** Quasibarreled and bornological vector groups. 82f:46002a
- Correction of some printing mistakes in the paper: "Quasibarreled and bornological vector groups". 82f:46002b
- Rodriguez-Salinas, Baltasar** On the class of the barreled space $l_p^0(\Sigma)$. (Spanish. English summary) 82k:46005
- Tsirlinikov, Bella** See *De Wilde, Marc*, 82c:46007
- Valdivia, Manuel** On suprabarreled spaces. 82h:46003
- (with Pérez Carreras, Pedro) On totally barreled spaces. 82m:46002

secondary classifications:

- Schmets, Jean An example of the barrelled space associated to $C(X; E)$. (82g:46075)
 Tsirolnikov, Bella On conservation of barrelledness properties in locally convex spaces. (French summary) (82c:46005)

46A09 Bornological spaces

- Beattie, Ronald The Hahn-Banach problem in convergence vector spaces. 82c:46008
 Behrens, Roland Eine neue Charakterisierung bornologischer und verwandter Räume. 82g:46004
 Bombal, Gerdón, F. (with Rodríguez Marín, L.) An extension of sequential spaces. (Spanish. English summary) 82g:46005
 Gähler, Werner Generalized bornologies and projective tensor products. 82h:46004
 Moscatelli, Vincenzo B. Représentations des espaces complètement bornologiques et des espaces nucléaires. (English summary) 82d:46006
 Rodríguez Marín, L. See Bombal Gerdón, F., 82g:46005

secondary classifications:

- Hogbe-Nlend, H. Sur les quotients d'espaces conucléaires ou co-s-nucléaires. (Italian summary) [On the quotients of conuclear or co-s-nuclear spaces] (82k:46006)
 Petrov, Kalin P. Bornology of polynormed algebras. (Russian) (82k:46074)
 Radosavljević, Mirjana Quasibarrelled and bornological vector groups. (82f:46002a)
 Correction of some printing mistakes in the paper: "Quasibarrelled and bornological vector groups". (82f:46002b)

46A10 Locally bounded topological linear spaces

- Soler Dorda, Mariano A generalization of convexity and its application to topological vector spaces. (Spanish) 82a:46003

secondary classifications:

- Kuhn, Harald (with Schrempf, Wolfgang) Superposition stetiger Abbildungen. (82b:26016)
 Popa, Nicolae Basic sequences and subspaces in Lorentz sequence spaces without local convexity. (82f:46012)
 Schrempf, Wolfgang See Kuhn, Harald, (82b:26016)

46A12 Spaces defined by special inductive or projective limits (LF-, nuclear, Schwartz, Silva spaces, etc.) [See also 46M10, 46M40.]

- Apiola, Heikki Every nuclear Fréchet space is a quotient of a Köthe-Schwartz space. 82d:46007
 Bellenot, Steven F. Each Schwartz-Fréchet space is a subspace of a Schwartz-Fréchet space with an unconditional basis. 82d:46008
 Benndorf, Andreas Sur les relations entre quelques propriétés d'approximation bornée dans des espaces de Fréchet nucléaires et de Fréchet-Schwartz. (English summary) 82a:46004
 Dubinsky, Ed Basic sequences in a stable finite type power series space. 82g:46006
 Hogbe-Nlend, H. Sur les quotients d'espaces conucléaires ou co-s-nucléaires. (Italian summary) [On the quotients of conuclear or co-s-nuclear spaces] 82k:46006
 Kamthan, P. K. Kolmogorov's diameters and their applications. 82k:46007
 Kramar, Edvard Locally convex topological vector spaces with Hilbertian seminorms. 82k:46008a

Linear operators in H -locally convex spaces. 82k:46008b

- Narayanaswami, P. P. See Saxon, Stephen A., 82g:46007
 Saxon, Stephen A. (with Narayanaswami, P. P.) Metrizable (LF)-spaces, (db)-spaces, and the separable quotient problem. 82g:46007
 Zarnadze, D. N. Representations of strict (LF)-spaces. (Russian) 82g:46008

secondary classifications:

- Colojară, Alexandra Algèbre symétrique du dual d'un espace nucléaire-DF. (82j:46090)
 Moraes, Luiz A. Holomorphic functions on strict inductive limits. (82m:46051)
 Otto, Christoph Approximation properties of locally convex spaces. (82d:46003)
 Prada-Blanco, J. Local convexity in sequence space. (82k:46017)
 Valdivia, Manuel Representations of the spaces $\mathcal{Q}(\Omega)$ and $\mathcal{Q}'(\Omega)$. (Spanish. English summary) (82m:46037)
 A representation of the space $\mathcal{Q}_+(\Omega)$. (Spanish. English summary) (82m:46038)

46A14 Spaces defined by compactness properties (Montel spaces, etc.)

- Mankiewicz, P. (with Vilimovský, Jiří) A remark on uniform classification of boundedly compact linear topological spaces. 82g:46009
 Vilimovský, Jiří See Mankiewicz, P., 82g:46009

46A15 Other topological linear spaces

- Ambrožko, Edward The pseudotopological structure of generalized modular spaces. 82h:46005
 Björn, Sten Einbettbarkeit in den Bidualraum und Darstellbarkeit als projektiver Limes in Kategorien von Limesvektorräumen. 82d:46009
 Summierbarkeitsbegriffe in Limesvektorräumen. 82d:46010
 Bulut, E. Continuous operators on paranormed spaces and matrix transformations of strong Cesàro summable sequences. (Turkish summary) 82k:46009
 Cârja, O. A pseudotopological structure for $L(X, Y)$ with X, Y linear topological spaces. 82h:46006
 Cho, Yeol Je (with Ha, Ki Sik; Kim, Wan Se) Strictly convex linear 2-normed spaces. 82k:46010

- Čukčić, Ljubomir Boundedness and compactness in a mixed topology. 82c:46009
 Dierolf, Susanne The Fréchet space ω admits a strictly stronger separable and quasicomplete locally convex topology. 82g:46010
 Faires, Barbara T. Varieties and vector measures. 82a:46005
 Feldman, W. A. See Porter, J. F., 82b:46003
 German, L. F. (with Soltan, V. P.) Quasiconvexity in linear and metric spaces. (Russian) 82m:46003

- Ha, Ki Sik See Cho, Yeol Je; et al., 82k:46010
 Kadetburg, Zoran Ultra- b -barrelled spaces and the completeness of $L_b(E, F)$. 82d:46011
 Kim, Wan Se See Cho, Yeol Je; et al., 82k:46010
 Lahiri, B. K. On extension of a theorem of Kominck. 82i:46007
 Mikusiński, Piotr On extension of pseudonorms. (See 82k:54001)
 Min'kova, R. M. Weak Korovkin spaces. (Russian) 82g:46011
 Narang, T. D. Unicity theorem and strict convexity of metric linear spaces. 82g:46012
 Oswald, Peter On a connectedness property of the complements of zero-neighbourhoods in topological vector spaces. 82h:46007
 Porter, J. F. (with Feldman, W. A.) Convergence structures for operators. 82h:46003
 Serban-Tofan, Doina Spaces with vector-valued norm. (Romanian. English summary) 82j:46002
 Soltan, V. P. See German, L. F., 82m:46003

secondary classifications:

- Bastero Elezalde, Jesús Minkowski convexity and semiconvexity. (Spanish) (82c:46095)
 Esfahanizadeh, J. (with Siddiqi, A. H.) On quasi-2-normed spaces. II. (82i:46024)
 Gähler, Werner Generalized Marinescu convergence. (82m:58005)
 Govaerts, W. Nachbin's theorem and sequentially continuous linear functionals for linearly topologized spaces. (82a:46081)
 Katsaras, Athanasios K. Fuzzy topological vector spaces. I. (82i:54020)
 Nakanishi, Shizu Main spaces in distribution theory treated as ranked spaces and Borel sets. (82k:46057)
 Siddiqi, A. H. See Esfahanizadeh, J., (82i:46024)
 Sperner, Emanuel, Jr. Zur expliziten Bestimmung der Norm der selbstadjungierten Minkowski-Räume. (82f:52004)

46A20 Duality theory

- Cochran, Allan C. (with Mukherjee, T. K.) Unique topologies in duality. 82g:46013
 Dierolf, Peter (with Swartz, Charles) Subfamily-summability for precompact operators and continuous vector-valued functions. 82h:46008
 Mukherjee, T. K. See Cochran, Allan C., 82g:46013
 Surjit Singh Khurana Dunford-Pettis property for strict topologies. (See 82g:28002)
 Swartz, Charles See Dierolf, Peter, 82h:46008
 Tsirolnikov, Bella On conservation of barrelledness properties in locally convex spaces. (French summary) 82c:46005

secondary classifications:

- Dierolf, Peter (with Voigt, Jürgen) Calculation of the bidual for some functions spaces. Integrable distributions. (82d:46060)
 Godefroy, Gilles Prolongement de fonctions convexes définies sur un espace de Banach E au bidual E'' . Applications. (English summary) (82h:46022)
 Voigt, Jürgen See Dierolf, Peter, (82d:46060)
 Wriedt, Michael Präkompakte Mengen in lokalkonvexen Räumen. (82k:46013)

46A22 Extension and lifting of functionals and operators [See also 46M10.]

- Fuchssteiner, Benno (with König, Heinz) New versions of the Hahn-Banach theorem. 82k:46011
 Ioffe, Alexandre D. A new proof of the equivalence of the Hahn-Banach extension and the least upper bound properties. 82j:46003
 Jiménez Guerra, Pedro Generalizations of the Hahn-Banach theorem for preordered semimodules. (Spanish) 82c:46010
 König, Heinz See Fuchssteiner, Benno, 82k:46011
 Nehse, Reinhard Separation of two sets in a product space. 82i:46003

secondary classifications:

- Beattie, Ronald The Hahn-Banach problem in convergence vector spaces. (82c:46008)
 Kabbalo, Winfried Lifting-Sätze für Vektorfunktionen und (ϵL) -Räume. (82k:46099)
 Kalton, N. J. (with Roberts, James W.) A rigid subspace of L_0 . (82j:46039)
 Németh, A. B. Some differential properties of the convex mappings. (82k:46066)
 Roberts, James W. See Kalton, N. J., (82j:46039)
 Wong, Yau Chuen A factorization theorem for Schwartz linear mappings. (82c:47024)

46A25 Reflexivity and semi-reflexivity

- Valdivia, Manuel Convex sets in metrizable spaces. 82g:46014

secondary classifications:

- Brodsky, I. Preservation of closure in a locally convex space. I. (82c:46004)

46A30 Open mappings and closed graph theorems and completeness (including B -, B_0 -completeness)

- Efimova, T. A. A theorem on a closed graph. (Russian) 82g:46015
 Hitzjak, V. A. A theorem on a closed graph for a sublinear operator. (Russian) 82d:46012
 Hussein, D. (with Kamal, Aref) On S -complete spaces. 82c:46011

- Kamal, Aref See Hussein, D. 82c:46011
 Kim, Jonguk Openness of surjective continuous linear mappings. 82c:46006
 Rodríguez-Salinas, Baltasar On the Dieudonné-Grothendieck theorem. (Spanish. English summary) 82c:46006
 On the closed graph theorem. Linear subcontinuous mappings. (Spanish. English summary) 82c:46012
 Smirnov, E. I. Topological abelian groups. (Russian) 82c:46012

secondary classifications:

- Buhai, E. Continuous operators on paranormed spaces and matrix transformations of strong Cesàro summable sequences. (Turkish summary) (82c:46009)
 Dierolf, Peter (with Dierolf, Susanne) Some spaces are not the domain of a closed linear operator in a Banach space. (82f:47003)
 Dierolf, Susanne See Dierolf, Peter, (82f:47003)
 Kurczysz, Stanisław See Zowe, J., (82a:90153)
 Zampieri, Giuseppe An extension of the theorem on surjections between Fréchet spaces. Some of its applications. (Italian) (82m:35018b)
 Systems of the type $(P=f, Q=g)$ that are not globally solvable. (Italian. English summary) (82m:35018c)
 Zowe, J. (with Kurczysz, Stanisław) Regularity and stability for the mathematical programming problem in Banach spaces. (82a:90153)

46A32 Spaces of linear operators

- Collins, Heron S. (with Russ, Wolfgang) Weak compactness and convergence in operator spaces. (See 82g:28002)
 Pap, Endre On the continuous functions with the values in a semigroup. 82b:46004
 Russ, Wolfgang See Collins, Heron S., (See 82g:28002)

secondary classifications:

- Čirjá, O. A pseudotopological structure for $L(X, Y)$ with X, Y linear topological spaces. (82c:46006)
 Levašov, V. A. Operator orthogonal complements. (Russian) (82c:47049)
 Müller, Bernd Strict topologies and the continuous convergence structures. (82g:46002)

46A35 Summability and bases

- Dragilev, M. M. Topological vector spaces with equivalent bases. (Russian) 82c:46008
 Efimova, T. A. On weak bases in the inductive limits of barrelled normed spaces. (Russian. English summary) 82c:46013
 Gupta, Manjul Schauder decompositions and their applications. 82b:46009
 (with Kamthan, P. K.) Quasiregular orthogonal systems of subspaces. 82c:46007
 See also Kamthan, P. K., 82b:46005
 Kamthan, P. K. (with Gupta, Manjul) Addendum and corrigendum to the paper: "Several notions of absolute bases" [J. Reine Angew. Math. 307/308 (1979), 160–165; MR 80h:46007]. 82b:46005
 See also Gupta, Manjul, 82c:46007
 Korobeinik, Ju. F. Representative systems. (Russian) 82b:46006
 Representative systems. (Russian) 82c:46014

secondary classifications:

- Dragilev, M. M. (with Oleinikov, A. H.) Continuable absolute bases in F -spaces. (Russian) (82d:46005)
 Husain, Taqdir (with Watson, Saleem) Topological algebras with orthogonal Schauder bases. (82b:46064)
 Kamthan, P. K. (with Ray, S. K.) Schauder bases and the Köthe structure of associated sequence spaces. (Italian summary) (82b:46011)
 Oleinikov, A. H. See Dragilev, M. M., (82d:46005)
 Ray, S. K. See Kamthan, P. K., (82b:46011)
 Szarek, Stanisław Biorthogonal systems in function spaces. (Polish) (82b:42020)
 Watson, Saleem See Husain, Taqdir, (82b:46064)

46A40 Ordered topological linear spaces, vector lattices [See also 06F20, 46B30.]

- Akilov, G. P. (with Kutateladze, S. S.) Some problems of the theory of ordered vector spaces. (Russian) 82d:46013
 Annulis, John T. Order arguments on the dimension of vector lattices. 82k:46013
 Benderskii, O. Ja. A topologization of l -groups and vector lattices. (Russian) 82d:46014
 Bondarev, A. S. On completeness and projection properties of homomorphic images of vector lattices. (Russian) 82f:46004
 Breckner, Wolfgang W. (with Orbán, Gheorghe) \star Continuity properties of rationally s -convex mappings with values in an ordered topological linear space. 82a:46007
 Brusowski, Bruno An application of Korovkin's theorem to certain partial differential equations. 82f:46005
 Chivukula, R. Rao (with May, William D.) A generalization of Schaefer's order duality theorem. 82c:46015
 Danilenko, I. F. Topologization of the relatively uniform completion of an ordered vector space and some of its applications. (Russian) 82b:46007
 Donskoi, D. E. The structure of maximal ideals in ordered rings. (Russian) 82c:46009
 Duhoux, Michel Order precompactness in topological Riesz spaces. 82g:46016
 See also Ng, Kung Fu, 82g:46018
 Fedorova, V. P. Functional vector lattices with integral properties. (Russian) 82f:46006
 Feldman, W. A. (with Porter, J. F.) The relative uniform convergence structure. 82b:46008
 Flösser, Hans O. (with Irmisch, R.; Roth, Walter) Infimum-stable convex cones and approximation. 82b:46009

- Gusev, A. I. The structure of ideals in ordered rings. (Russian) 82c:46010
 Irmisch, R. See Flösser, Hans O.; et al., 82b:46009
 Kutateladze, S. S. Modules allowing convex analysis. (Russian) 82d:46015
 Convex analysis in modules. (Russian) 82k:46014
 See also Akilov, G. P., 82d:46013
 Lišic, E. A. Quasi-interior points of a cone. (Russian) 82c:46016
 Lozanovskii, G. Ja. Order separability of K -spaces. (Russian) 82c:46008
 Makarov, B. M. (with Weber, Martin) Über die Realisierung von Vektorverbänden. III. Realisierungen mit Hilfe von Basen finiter Elemente. 82f:46007
 May, William D. See Chivukula, R. Rao, 82c:46015
 Meyer, Mathieu Les algèbres réticulées archimédiennes. 82g:46017
 Nehse, Reinhard A new concept of separation. 82m:46004
 Ng, Kung Fu (with Duhoux, Michel) Directedness in ordered normed spaces and operators. 82g:46018
 Nicolau, Bogdan The representation of certain ordered topological spaces. (Romanian. English summary) 82f:46008
 Onickanskii, M. B. Reconstruction of a sublinear operator as a supremum with respect to partial differentials. (Russian) 82g:46019
 Orbán, Gheorghe See Breckner, Wolfgang W., 82a:46007
 Pogribni, V. D. A theorem on the topological imbedding of vector lattices. (Ukrainian. English and Russian summaries) 82m:46005
 Compatibility of the structures of a vector space and a vector lattice. (Ukrainian. English and Russian summaries) 82j:46004
 Porter, J. F. See Feldman, W. A., 82b:46008
 Roth, Walter See Flösser, Hans O.; et al., 82b:46009
 Schäffer, Juan Jorge Natural metrics on faceless cones. 82b:46015
 Smirnov, E. I. Nonflatness of a cone in a locally convex space. (Russian) 82c:46009
 Vuza, Dan Sur les espaces vectoriels réticulés complexes. 82c:46011
 Weber, Martin On the realization of vector lattices on locally compact topological spaces. 82c:46008
 See also Makarov, B. M., 82f:46007

secondary classifications:

- Azorkin, V. I. (with Bahtin, I. A.) Normality and nonflatness of a pair of wedges of linear operators. (Russian) (82d:47044)
 Bahtin, I. A. See Azorkin, V. I., (82d:47044)
 Bernau, S. J. Orthomorphisms of Archimedean vector lattices. (82b:47043)
 Birkhoff, Garrett \star Lattice theory. (82a:06001)
 Buhvalov, A. V. (with Lozanovskii, G. Ja.) Representations of linear functionals and operators on vector lattices and certain applications of these representations. (Russian) (82d:46044)
 (with Veksler, A. I.; Geiler, V. A.) Normed lattices. (Russian) (82b:46019)
 Cristescu, Romulus Use of order structures in some functional analytic researches. (Romanian) (82c:46002)
 Duchaov, Miloslav Remark on analytic functions in ordered spaces. (Russian summary) (82f:30004)
 Filin, V. A. Linear operators that are quasipositive with respect to a wedge. (Russian. Tajiki summary) (82b:47044)
 Foguel, Shaul R. The Hopf decomposition of a Riesz space. (82m:47028)
 Friedberg, Michael Almost-periodic functions, compactifications, and faces of finite-dimensional cones. (82k:43007)
 Gavrilov, A. I. See Slugin, S. N.; et al., (82c:49004)
 Geiler, V. A. See Buhvalov, A. V.; et al., (82b:46019)
 Gorobov, V. V. Minimality and quasiminimality in ordered vector spaces. (Russian. English summary) (82k:90130)
 Gusev, A. I. (with Smirnova, N. A.) Some properties of ordered rings. (Russian) (82g:06029)
 Hižnjak, V. A. A theorem on a closed graph for a sublinear operator. (Russian) (82c:46012)
 Ioffe, Alexandre D. A new proof of the equivalence of the Hahn-Banach extension and the least upper bound properties. (82j:46003)
 Isac, George \star Cônes localement bornés et cônes complètement réguliers. (French) [Locally bounded cones and completely regular cones] (82j:47069)
 Isobe, Kiro A certain example of non-Archimedean Riesz space. (82m:46078)
 Jiménez Guerra, Pedro Generalizations of the Hahn-Banach theorem for preordered semimodules. (Spanish) (82c:46010)
 Kalašnikov, A. L. See Slugin, S. N.; et al., (82c:49004)
 Lipecti, Zbigniew (with Plachky, Detlef; Thomsen, W.) Extensions of positive operators and extreme points. I. (82k:47055)
 Extensions of positive operators and extreme points. II. (82k:47056)
 Lozanovskii, G. Ja. See Buhvalov, A. V., (82d:46044)
 Plachky, Detlef See Lipecti, Zbigniew; et al., (82k:47055)
 Slugin, S. N. (with Kalašnikov, A. L.; Gavrilov, A. I.) \star Применение теории частично упорядоченных пространств в задачах оптимизации. (Russian) [Application of the theory of partially ordered spaces in problems of optimization] (82c:49004)
 Smirnova, N. A. See Gusev, A. I., (82g:06029)
 Šul'ga, D. D. Continuity of α -bounded mappings. (Russian) (82b:47047)
 Szulga, Jerzy On operator characterization of AM- and AL-spaces. (82m:46019)
 Thomsen, W. See Lipecti, Zbigniew; et al., (82k:47055)
 Veksler, A. I. See Buhvalov, A. V.; et al., (82b:46019)
 Wickstead, Anthony W. Relatively central operators on Archimedean vector lattices. I. (82g:47027)
 Extremal structure of cones of operators. (82i:47069)

46A45 Sequence spaces (including Köthe sequence spaces)

- Ahmad, Z. U. (with Saraswat, S. K.) Absolute convexity in the spaces of strongly α -summable sequences. 82g:46020
 Antonio Andréu, José A. Bornological sequence spaces. (Spanish) 82c:46012

- Arazy, Jonathan More on convergence in unitary matrix spaces. **82j:46009**
- Aytuna, A. (with Terzioğlu, T.) On certain subspaces of a nuclear power series spaces of finite type. **82j:46016**
- Bulut, E. (with Çakar, Ö.) The sequence space $l(p, s)$ and related matrix transformations. (Turkish summary) **82j:46005**
- Çakar, Ö. See Bulut, E. **82j:46005**
- Calov, P. A. Bernstein diameters of sets in Orlicz sequence spaces. (Russian) **82j:46016**
- Deeb, Waleed M. (with Hussein, D.) The extreme points and convexity of the unit ball of $L(f)$ spaces. **82j:46013**
- See also Hussein, D., **82h:46010**
- De Grande-De Kimpe, Nicole $L_f(a, r)$ -spaces between which all the operators are compact. II. **82j:46010**
- Freedman, A. R. Generalized limits and sequence spaces. **82m:46006**
- Gupta, Manjul (with Kamthan, P. K.) Infinite matrices and tensorial transformations. **82j:46014**
- The generalized spaces $l^p(X)$ and $m_0(X)$. **82c:46010**
- (with Kamthan, P. K.; Patterson, John) Duals of generalized sequence spaces. **82j:46006**
- Hussein, D. (with Deeb, Waleed M.) On the dual space of $L(f)$. **82h:46010**
- See also Deeb, Waleed M., **82j:46013**
- Kabaila, V. On the imbedding of sequence spaces $l^p(\mu)$ into $l^q(\nu)$. (Russian. Lithuanian and English summaries) **82m:46007**
- Kalton, N. J. (with Peck, N. Tenney) Twisted sums of sequence spaces and the three space problem. **82j:46021**
- Kaminska, Anna Rotundity of Orlicz-Musiela sequence spaces. (Russian summary) **82m:46008**
- Kamthan, P. K. (with Ray, S. K.) Schauder bases and the Köthe structure of associated sequence spaces. (Italian summary) **82c:46011**
- See also Gupta, Manjul, **82j:46014** and **82j:46006**
- Kizmaz, H. On certain sequence spaces. **82j:46022**
- Klis, Czesław Remarks on sequence K -spaces. (Russian summary) **82j:46007**
- Kondakov, V. P. Imbedding of Köthe spaces and equivalence of bases. (Russian) **82j:46017**
- Laugwitz, Detlef Verallgemeinerte Grenzwerte beschränkter Zahlfolgen. **82j:46015**
- Maddox, Ivor J. Generalized Köthe-Toeplitz duals. **82a:46009**
- Montesinos, V. Compactness in sequence spaces. (Spanish) **82j:46008**
- Nanda, Sudarsan On Banach sequence spaces. **82j:46023**
- Ng, Peng Nung On a sequence space of nonabsolute type. **82h:46010**
- Nyberg, Kaisa On subspaces of products of nuclear Fréchet spaces. **82a:46010**
- Patterson, John See Gupta, Manjul; et al., **82j:46006**
- Peck, N. Tenney See Kalton, N. J., **82j:46021**
- Popa, Nicolae On the complemented subspaces of l_p , $0 < p < 1$. **82j:46011**
- Basic sequences and subspaces in Lorentz sequence spaces without local convexity. **82j:46012**
- Prada-Blanco, J. Local convexity in sequence space. **82j:46017**
- Ray, S. K. See Kamthan, P. K., **82j:46011**
- Rhoades, B. E. Some sequence spaces which include the l^p spaces. **82j:46016**
- Saraswat, S. K. Some sequence spaces and generalized almost boundedness. **82j:46009**
- See also Ahmad, Z. U., **82j:46020**
- Serban-Tofan, Doina Spaces of vector sequences. (Romanian. English summary) **82j:46010**
- Shon, Kwang Ho On the Cesàro sequence spaces. (Korean summary) **82c:46011**
- Terzioğlu, T. See Aytuna, A., **82j:46016**
- Valdivia, Manuel Quotients of echelon spaces. (Spanish. English summary) **82j:46017**
- Some properties of echelon spaces. (Spanish. English summary) **82j:46018**
- On quasinormable echelon spaces. **82h:46012**
- secondary classifications:
- Allen, G. D. (with Legg, D. A.; Ward, Joseph D.) Hermitian liftings in Orlicz sequence spaces. (82a:47031)
- Alshuler, Z. The modulus of convexity of Lorentz and Orlicz sequence spaces. (82c:46020)
- Antosik, P. Sequences of mappings. (Russian) (82d:40001)
- Das, Gokulananda (with Mishra, S. K.) A note on a theorem of Maddox on strong almost convergence. (82d:40009)
- Dawson, David F. Summability factors for certain sequence spaces. (82f:40009)
- Dubinsky, Ed Basic sequences in a stable finite type power series space. (82g:46006)
- Johnson, P. D., Jr. (with Mohapatra, Ram Narayan) Inequalities involving infinite matrices with nonnegative entries. (82j:40012)
- Kašpirovskii, O. I. Realization of some spaces of type S as spaces of sequences. (Ukrainian. English and Russian summaries) (82j:46051)
- Legg, D. A. See Allen, G. D.; et al., (82a:47031)
- Leibowitz, Gerald Some Hausdorff sequence spaces. (82j:40009)
- Maddox, Ivor J. (with Willey, M. A. L.) Multiplication on the generalized entire sequences. (82j:40005)
- ★Infinite matrices of operators. (82c:40012)
- Mishra, S. K. See Das, Gokulananda, (82d:40009)
- Mohapatra, Ram Narayan See Johnson, P. D., Jr., (82j:40012)
- Müller, Gerhard Otto (with Trautner, Rolf) Fatou-Riesz theorems in general sequence spaces. (82c:40006)
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- On strongly F_2 -summable sequences. (Turkish summary) (82j:40006)
- Partington, J. R. Subspaces of certain Banach sequence spaces. (82h:46036)
- Samuel, C. Sur les sous-espaces de $l_1 \otimes l_2$. (82j:46029)
- Skarda, Vencil l_1 -bounds for inner products. (82g:26027b)
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- Thorpe, B. An extension of Kuttner's theorem. (82h:40013)
- Trautner, Rolf See Müller, Gerhard Otto, (82c:40006)
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- Ulbricht, Ralf Weighted sums of independent identically distributed random variables. (82j:60090)
- Valdivia, Manuel On the space $\mathfrak{B}_0(\Omega)$. (Spanish. English summary) (82j:46053)
- Ward, Joseph D. See Allen, G. D.; et al., (82a:47031)
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- Zaharjuta, V. P. Isomorphism of spaces of analytic functions. (Russian) (82j:46032)

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- Montesinos Santalucia, Vicente On Šmulian-type theorems in locally convex spaces. (Spanish) **82j:46011**
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- Castaing, Charles Quelques aperçus des résultats de compacité dans L_E^1 ($1 \leq p < +\infty$). (82j:46049)
- Helmer, Dietrich Criteria for Eberlein compactness in spaces of continuous functions. (82j:54020)
- Kalton, N. J. (with Peck, N. Tenney) A re-examination of the Roberts example of a compact convex set without extreme points. (82h:46055)
- Kühn, Burkhard Orthogonal kompakte Teilmengen topologischer Vektorverbände. (English summary) (82d:46039)
- Peck, N. Tenney See Kalton, N. J., (82h:46055)

46A55 Convexity, Choquet theory [See also 52A07.]

- Andersen, Tage Bai Relative width and extension constants for compact convex sets. **82a:46011**
- Asimov, L. (with Ellis, A. J.) ★Convexity theory and its applications in functional analysis. **82m:46009**
- Benkő, József A note on affine selection and separation. **82a:46012**
- Ellis, A. J. See Asimov, L., **82m:46009**
- Fuchsteiner, Benno Dirichlet states. **82h:46011**
- Hanche-Olsen, Harald Split faces and ideal structure of operator algebras. **82g:46024**
- Hess, H.-U. Infinite-dimensional convex sets with a property common to finite-dimensional convex sets. **82c:46012**
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- Khurana, Surjit Singh Pointwise compactness on extreme points. **82h:46018**
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- Superkonvexität und schwache Kompaktheit. **82j:46012**
- Roth, Walter Abstrakte Choquet-Ordnung auf einer kompakten Menge. [Abstract Choquet ordering on a compact set] **82j:46021**
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- Saab, Paulette See Saab, Elias, **82j:46026**
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- Watanabe, Hisako The Choquet boundary and the integral representation. **82j:46013**

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- Arutjunov, A. V. Convexity properties of the Legendre transformation. (Russian) (82h:52010)
- Brown, A. L. Chebyshev sets and facial systems of convex sets in finite-dimensional spaces. (82f:52006)
- Ellis, A. J. (with Rao, T. S. S. R. K.; Roy, A. K.; Uttersrud, U.) Facial characterizations of complex Lindenstrauss spaces. (82j:46015)
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- German, L. F. (with Soltan, V. P.) Quasiconvexity in linear and metric spaces. (Russian) (82m:46003)
- Goodearl, K. R. (with Handelman, David) Metric completions of partially ordered abelian groups. (82h:06020)
- von Neumann regular rings: connections with functional analysis. (82d:16012)
- Handelman, David See Goodearl, K. R., (82h:06020)
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- Narang, T. D. Generalisations of different types of convexities to metric spaces. (82j:52005)
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- Rao, T. S. S. R. K. See Ellis, A. J.; et al., (82j:46015)
- Reif, Jiri (P)-sets, quasipolyhedra and stability. (82j:46021)
- Roy, A. K. See Ellis, A. J.; et al., (82j:46015)
- Soltan, V. P. Convex hulls that preserve diameters of sets. (Russian. English summary) (82h:52005)
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- Haslinger, Friedrich On the geometry in linear spaces with Hilbert norms. **82j:46019**

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- Boboc, Nicu (with Bucur, Gheorghe; Cornea, Aurel) ★Order and convexity in potential theory: H -cones. (82i:31011)
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- Dierolf, Susanne (with Floret, Klaus) Über die Fortsetzbarkeit stetiger Normen. (82g:46001)
 Fitzpatrick, Simon Metric projections and the differentiability of distance functions. (82h:41028)
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- Andrew, Alfred D. James' quasireflexive space is not isomorphic to any subspace of its dual. 82g:46028
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- Alspach, Dale E. (with Benyamini, Y.) $C(K)$ quotients of separable ℓ_∞ spaces. 82j:46017
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- Guerre, S. Quelques propriétés des espaces de Banach stables. **82d:46026**
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- James, Robert C. Erratum to: "Renorming the Banach space c_0 " [Proc. Amer. Math. Soc. **80** (1980), no. 4, 631-634; MR **81k:46014**]. **82g:46038**
- Johnson, William B. Banach spaces all of whose subspaces have the approximation property. **82d:46024**
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- Lima, Ásvold Geometry of Banach spaces and intersection properties of balls. (See **82i:00012**)
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- Pisier, Gilles Sur les espaces de Banach de dimension finie à distance extrême d'un espace euclidien [d'après V. D. Milman et H. Wolfson]. **82d:46030**
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- Plant, Andrew T. A note on the modulus of convexity. **82h:46030**
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- Siddiqi, A. H. See Esfahanizadeh, J., **82i:46024**
- Smith, Mark A. A Banach space that is MLUR but not HR. **82h:46032**
- Sullivan, Francis Nearly smooth norms on Banach spaces. **82i:46031**
- Szarek, Stanisław Volume estimates and nearly Euclidean decompositions for normed spaces. **82g:46041**
- (with Tomczak-Jaegermann, Nicole) On nearly Euclidean decomposition for some classes of Banach spaces. **82e:46032**
- Talagrand, Michel Hyperplans universellement mesurables. (English summary) **82a:46023**
- Tomczak-Jaegermann, Nicole See Szarek, Stanisław, **82e:46032** and Davis, W. J.; et al., **82h:46024**
- Tsarpalias, A. See Negrepontis, S., **82i:46018**
- Tzafriri, L. See König, Hermann, **82j:46022**
- Vaher, F. S. A property of bounded approximation in separable Banach spaces. (Russian) **82e:46021**
- (with Plička, A. M.) The bounded approximation property and linear finite-dimensional regularizability. (Russian) **82i:46033**
- Valentine, J. E. See Andalafte, E. Z.; et al., **82e:46016**
- Vlasov, L. P. Properties of generalized elements of the best approximation. (Russian) **82e:46022**
- Wang, Chong Hu See Yin, Hong Sheng; et al., **82g:46042**
- Waymont, S. G. See Andalafte, E. Z.; et al., **82e:46016**
- Wriedt, Michael Charakterisierungen lokal uniform konvexer Mengen. **82h:46029**
- Yin, Hong Sheng (with Zhao, Jun Feng; Wang, Chong Hu) On λ -separated subsets of unit spheres of normed linear spaces. (Chinese. English summary) **82g:46042**
- Yost, David M -ideals, the strong 2-ball property and some renorming theorems. **82f:46019**
- Zajíček, Luděk A note on norm-attaining functionals. (Czech summary) **82i:46032**
- Zhao, Jun Feng See Yin, Hong Sheng; et al., **82g:46042**
- secondary classifications:
- Amir, D. (with Ziegler, Zvi) Relative Chebyshev centers in normed linear spaces. I. **(82i:41030)**
- Andrew, Alfred D. (with Green, William L.) On James' quasireflexive Banach space as a Banach algebra. **(82d:46077)**
- de Araujo, Aloisio (with Giné, Evarist; Mandrekas, V.; Zinn, Joel) On the accompanying laws theorem in Banach spaces. **(82i:60017)**
- Arazy, Jonathan More on convergence in unitary matrix spaces. **(82f:46009)**
- Baillon, Jean-Bernard Caractère borné de certains générateurs de semi-groupes linéaires dans les espaces de Banach. (English summary) **(82a:47038)**
- (with Schöneberg, R.) Asymptotic normal structure and fixed points of nonexpansive mappings. **(82c:47068)**
- Baker, J. M. A note on compact operators which attain their norm. **(82i:47028)**
- Bilyeu, Russell G. (with Lewis, Paul W.) Uniform differentiability, uniform absolute continuity and the Vitali-Hahn-Saks theorem. **(82g:46083)**
- Bourgain, Jean Normes absolument sommantes et sous-espaces l^∞ . (English summary) **(82e:47060)**
- Bridges, Douglas S. A constructive proximality property of finite-dimensional linear subspaces. **(82m:41024)**
- Bruck, Ronald E. On the convex approximation property and the asymptotic behavior of nonlinear contractions in Banach spaces. **(82h:47051)**

- Chalmers, Bruce L. A natural simple projection with norm $< \sqrt{n}$. (82m:41019)
- Cheney, E. W. See Franchetti, Carlo, (82i:41042)
- Ding Hing Thang (with Hgwen Zui Tien) On the convergence of martingales and geometric properties of Banach spaces. (Russian. English summary) (82m:60006)
- De Blasi, F. S. (with Myjak, Józef) On the minimum distance theorem to a closed convex set in a Banach space. (Russian summary) (82m:41027)
- Dierolf, Peter (with Swartz, Charles) Subfamily-summability for precompact operators and continuous vector-valued functions. (82h:46006)
- Franchetti, Carlo (with Cheney, E. W.) Simultaneous approximation and restricted Chebyshev centers in function spaces. (82i:41042)
- Gilbert, John E. (with Leih, Thomas J.) Factorization, tensor products, and bilinear forms in Banach space theory. (82h:46098)
- Gillespie, T. A. Spectral measures on spaces not containing l^∞ . (82g:47026)
- Giné, Evarist See de Araujo, Aloisio; et al., (82i:60017)
- Godefroy, Gilles Compacts de Rosenthal. (English summary) (82f:54030)
- Green, William L. See Andrew, Alfred D., (82d:46077)
- Katona, D. (with Stečkin, B. S.) Combinatorial numbers, geometric constants and probabilistic inequalities. (Russian) (82c:60017)
- Kühn, Thomas (with Linde, Werner) The r -nuclearity ($0 < r \leq 1$) of Gaussian covariances. (82h:47024)
- (with Linde, Werner) Gaußsche Kovarianzoperatoren in $L_p(v)$, $1 \leq p < \infty$. (Russian and English summaries) (82h:60004)
- γ -summing operators in Banach spaces of type p ($1 < p \leq 2$) and cotype q ($2 < q < \infty$). (Russian summary) (82g:47016)
- Kvaratcheliya, V. V. On unconditional convergence of random series in Banach spaces. (82i:60022)
- Lambert, Joseph M. Theory of nearest deviators. (82g:41032)
- Leih, Thomas J. See Gilbert, John E., (82h:46098)
- Lewis, Paul W. See Bilyeu, Russell G., (82g:46083)
- Light, William A. Central proximity maps. (82g:41033)
- Lima, Ásvald On extreme operators on finite-dimensional Banach spaces whose unit balls are polytopes. (82j:47061)
- Lin, Pei Kee B -convexity of the space of 2-summing operators. (82c:47056)
- Linde, Werner See Kühn, Thomas, (82h:47024) and (82h:60004)
- Makai, E., Jr. Correction to my paper: "The space of bounded maps into a Banach space" [Publ. Math. Debrecen 19 (1972), 177-179 (1973); MR 48 #6911]. (82g:46060)
- Mandrekar, V. See de Araujo, Aloisio; et al., (82i:60017)
- Müller, Bernd Strict topologies and the continuous convergence structures. (82g:46002)
- Mustafaez, L. G. Semigroups of linear continuous transformations. I, II. (Russian) (82c:47046)
- Myjak, Józef See De Blasi, F. S., (82m:41027)
- Nguyễn Duy Tiển (with Weron, Aleksander) Banach spaces related to α -stable measures. (82h:60011) See Ding Hing Thang, (82m:60006)
- Niculescu, Constantin P. On the equality $\bar{E}(E, F) = N(E, F)$. (Romanian. English summary) (82c:47057)
- Papini, P. L. Increasing the distance from the points of a set. (82f:41043)
- Rao, M. M. Structure and convexity of Orlicz spaces of vector fields. (82g:46065)
- Reimer, Manfred Extremal bases for normed vector spaces. (82c:46015)
- Rosinski, Jan (with Suchanecki, Zdzisław) On the space of vector-valued functions integrable with respect to the white noise. (82g:60009)
- Sastry, Sundaram M. A. See Srinivasan, Sundarajan; et al., (82a:41035)
- Schöneberg, R. See Baillon, Jean-Bernard, (82c:47068)
- Srinivasan, Sundarajan (with Sastry, Sundaram M. A.; Viswanath, K.) Orthogonality in Banach space and approximation theory. (82a:41035)
- Stečkin, B. S. See Katona, D., (82c:60017)
- Sternfeld, Y. Characterization of Bauer simplices and some other classes of Choquet simplices by their representing matrices. (82c:46017)
- Suchanecki, Zdzisław See Rosinski, Jan, (82g:60009)
- Swartz, Charles See Dierolf, Peter, (82h:46006)
- Viswanath, K. See Srinivasan, Sundarajan; et al., (82a:41035)
- Weron, Aleksander See Nguyen Zui Tien, (82c:60011)
- Zhang, Yin Nan On a necessary and sufficient condition for the existence of quasi-invariant measures. (Chinese. English summary) (82g:60015)
- Ziegler, Zvi See Amir, D., (82c:41030)
- Zinn, Joel See de Araujo, Aloisio; et al., (82i:60017)
- 46B22 Spaces with Radon-Nikodým property [See also 46G10.]**
- Anantharaman, R. (with Lewis, Ted; Whitfield, J. H. M.) Smoothability, strong smoothability and dentability in Banach spaces. (82g:46043)
- Bourgain, Jean (with Rosenthal, H. P.) Martingales valued in certain subspaces of L^1 . (82g:46044)
- A new class of \mathcal{E}^1 -spaces. (82f:46020)
- (with Talagrand, Michel) Dans un espace de Banach réticulé solide, la propriété de Radon-Nikodým et celle de Krein-Mil'man sont équivalentes. (82d:46032)
- Dinh Quang Luu On the Radon-Nikodým property in Banach spaces. (Russian summary) (82j:46023)
- Eggle, Leo A new characterization of Banach spaces X for which every operator in $\mathcal{E}(L^1, X)$ is completely continuous. (82d:46033)
- Ho, Aggie See James, Robert C., (82i:46033)
- Huff, R. The Radon-Nikodým property. (82h:46034)
- James, Robert C. Structure of Banach spaces: Radon-Nikodým and other properties. (82f:46021)
- (with Ho, Aggie) The asymptotic-norming and Radon-Nikodým properties for Banach spaces. (82i:46033)
- Kenderov, Pet'r S. Dense strong continuity of pointwise continuous mappings. (82d:46034)
- Lewis, Ted See Anantharaman, R.; et al., (82g:46043)
- McCartney, Philip W. Neighboring bushes and the Radon-Nikodým property for Banach spaces. (82g:46045)
- Riddle, Lawrence H. Weak Radon-Nikodým sets in conjugate Banach spaces. (See 82g:28082)
- Rosenthal, H. P. See Bourgain, Jean, (82g:46044)
- Saab, Elias (with Saab, Paulette) Sur quelques sous-espaces complémentés isomorphes à l_1 et sur l'espace de Banach X''/X . (English summary) (82c:46023)
- Saab, Paulette See Saab, Elias, (82c:46023)
- Stegall, Charles The Radon-Nikodým property in conjugate Banach spaces. II. (82h:46030)
- Talagrand, Michel See Bourgain, Jean, (82d:46032)
- Volintiru, Constantin On the Radon-Nikodým property in Banach spaces. (82h:46031)
- Whitfield, J. H. M. See Anantharaman, R.; et al., (82g:46043)
- secondary classifications:
- Bellow, Alexandra (with Eggle, Leo) Inégalités de Fatou généralisées. (English summary) (82f:60023)
- Bourgain, Jean Dunford-Pettis operators on L^1 and the Radon-Nikodým property. (82h:47047a)
- A characterization of non-Dunford-Pettis operators on L^1 . (82h:47047b)
- Costé, Alain Set-valued measures. (82h:28019)
- Eggle, Leo See Bellow, Alexandra, (82f:60023)
- Linde, Werner Mappings of vector measures and the coincidence of 1-Radonifying and absolutely summing operators. (82d:47028)
- 46B25 Classical Banach spaces in the general theory**
- Andrews, Kevin T. (with Uhl, J. J., Jr.) Weak compactness in $L_\infty(\mu, X)$. (82j:46024)
- Arazy, Jonathan On the geometry of the unit ball of unitary matrix spaces. (82g:46046)
- Bourgain, Jean A result on operators on $\mathcal{C}[0, 1]$. (82c:46024)
- Fonf, V. P. A property of spaces of continuous functions on segments of ordinals. (Russian) (82i:46034)
- Gluskin, E. D. Lower bounds for the diameters of some finite-dimensional sets. (Russian) (82h:46032)
- Johnson, William B. (with Maurey, B.; Schechtman, G.; Tzafriri, L.) Symmetric structures in Banach spaces. (82j:46025)
- Maurey, B. See Johnson, William B.; et al., (82j:46025)
- Moore, L. C., Jr. Approximately finite-dimensional Banach spaces. (82h:46035)
- Partington, J. R. Subspaces of certain Banach sequence spaces. (82h:46036)
- Šalit, Tibor A remark on l^p spaces. (Slovak and Russian summaries) (82j:46026)
- Samuel, C. Exemples d'espaces de Banach ayant la propriété de projection uniforme. (82g:46047)
- Schechtman, G. See Johnson, William B.; et al., (82j:46025)
- Szarek, Stanisław Bases and biorthogonal systems in the spaces C and L^1 . (82m:46018)
- Bases in the spaces C and L^1 . (82d:46035)
- Tzafriri, L. See Johnson, William B.; et al., (82j:46025)
- Uhl, J. J., Jr. See Andrews, Kevin T., (82j:46024)
- secondary classifications:
- Abourrea, J. (with San Miguel, M.) Unconditional basic sequences of random variables in $L^p(E)$. (82g:60012)
- Argyros, S. (with Negreponis, S.) Universal embeddings of l_n^1 into $C(X)$ and $L^\infty(\mu)$. (82c:46054)
- Bennett, Grahame Lectures on matrix transformations of l^p spaces. (82f:47037)
- Benyamini, Y. Small into-isomorphisms between spaces of continuous functions. (82j:46033)
- Bourgain, Jean Complémentation de sous-espaces L^1 dans les espaces L^1 . (82h:46031)
- Braverman, M. S. (with Semenov, E. M.) Characteristic properties of \mathcal{E}_p spaces. (Russian) (82h:46032)
- Crombez, G. (with Govaerts, W.) Towards a classification of convolution-type operators from l_1 to l_∞ . (82f:47038)
- Govaerts, W. See Crombez, G., (82f:47038)
- Iwanik, A. Extreme operators on AL-spaces. (82c:47058)
- Johnson, William B. Complemented subspaces of L_p which embed into $l_p \otimes l_2$. (82d:46047)
- Levy, M. Prolongement d'un opérateur d'un sous-espace de $L^1(\mu)$ dans $L^1(\nu)$. (82m:47022)
- Lin, Pei Kee Best approximation in $(L_1 \oplus \mathbb{R})_\infty$. (82i:41035)
- Maurey, B. Tout sous-espace de L^1 contient un l_p [d'après D. Aldous]. (82h:46037)
- Negreponis, S. See Argyros, S., (82c:46054)
- Pach, A. J. (with Smith, M. A.; Turett, B.) Flat Orlicz spaces. (82f:46031)
- San Miguel, M. See Abourrea, J., (82g:60012)
- Semenov, E. M. See Braverman, M. S., (82h:46032)
- Shi, Ying Guang The characterizations of best approximation in the space $L(X, \Sigma, \mu)$. (Chinese. English summary) (82g:41036)
- Smith, M. A. See Pach, A. J.; et al., (82f:46031)
- Turett, B. See Pach, A. J.; et al., (82f:46031)
- 46B30 Banach lattices [See also 46A40.]**
- Abramovič, Ju. A. Some new characterizations of AM-spaces. (Russian) (82c:46025)
- Baltina, A. A. Approximately minihedral cones. (Russian) (82d:46036)
- Bernau, S. J. (with Lacey, H. E.) Banach lattices and local unconditional structure. (82c:46026)
- Buhvalov, A. V. (with Veksler, A. I.; Geiler, V. A.) Normed lattices. (Russian) (82h:46019)
- Chaudhary, M. Nasir Convergence in regular ordered Banach spaces. (82d:46037)
- Evans, Richard Resolving Banach spaces. (82d:46038)
- Figiel, T. Uniformly convex norms on Banach lattices. (82a:46024)
- Geiler, V. A. See Buhvalov, A. V.; et al., (82h:46019)
- Godefroy, Gilles (with Talagrand, Michel) Classes d'espaces de Banach à prédual unique. (English summary) (82h:46020)

- Honda, Kōji On a characterization of some function space as Banach lattices under the topological equivalence. **82f:46022**
- Kajiser, Sten Local operators on Banach lattices. **82a:46025**
- Kühn, Burkhard Schwache Konvergenz in Banachverbänden. **82i:46035**
Orthogonalkompakte Teilmengen topologischer Vektorverbände. (English summary) **82d:46039**
- Lacey, H. E. See Bernau, S. J., **82c:46026**
- Lindenstrauss, J. (with Tzafriri, L.) On the isomorphic classification of injective Banach lattices. **82c:46033**
- Lozanovskii, G. Ja. On the conjugate space of a Banach lattice. (Russian) **82d:46041**
The space of antinormal functionals. (Russian) **82d:46040**
- Martignon, Laura Banach f -algebras and Banach lattice algebras with unit. **82c:46027**
- Schaefer, H. H. Aspects of Banach lattices. **82g:46048**
- Szulga, Jerzy On operator characterization of AM- and AL-spaces. **82m:46019**
- Talagrand, Michel Dual Banach lattices and Banach lattices with the Radon-Nikodým property. **82c:46028**
See also Godefroy, Gilles, **82b:46020**
- Tokarev, E. V. On c -convex Banach lattices. (Russian) **82b:46037**
- Tzafriri, L. See Lindenstrauss, J., **82k:46033**
- Veksel, A. I. See Buhvalov, A. V.; et al., **82b:46019**

secondary classifications:

- Aliprantis, Charalambos D. (with Burkinshaw, Owen) On weakly compact operators on Banach lattices. **(82j:47057)**
- Bernau, S. J. A unified approach to the principle of local reflexivity. **(82c:46019)**
- Bourgain, Jean (with Talagrand, Michel) Dans un espace de Banach réticulé solide, la propriété de Radon-Nikodým et celle de Kreĭn-Mil'man sont équivalentes. **(82d:46032)**
- Buhvalov, A. V. Generalization of the Kolmogorov-Nagumo theorem on tensor products. (Russian) **(82c:47055)**
- Burkinshaw, Owen See Aliprantis, Charalambos D., **(82j:47057)**
- Cristescu, Romulus Use of order structures in some functional analytic researches. (Romanian) **(82c:46002)**
- Derndinger, Roland Über das Spektrum positiver Generatoren. **(82b:47052)**
- Flösser, Hans O. Korovkin closures in AM-spaces. **(82c:41031)**
- Grober, Jacobus J. A short proof of the Ando-Krieger theorem. **(82b:47045)**
- Hudalov, V. T. Crossnorms on a tensor product connected with order. (Russian) **(82j:46112)**
- de Jonge, Ep Corrigendum to: "Spaces of vector-valued measurable functions" [Math. Z. 149 (1976), no. 2, 97-107; MR 58 #30158]. **(82b:46046)**
- Karabonov, A. P. Linear operators and functionals in lattice-normed spaces. (Russian) **(82b:47046)**
- Kozen, Dexter Semantics of probabilistic programs. **(82b:68011)**
- Lifšic, E. A. Quasi-interior points of a cone. (Russian) **(82c:46016)**
- Scheffold, Egon FF-Banachverbandsalgebren. **(82i:46060)**
- Synatzschke, J. Über einige verbandstheoretische Eigenschaften der Multiplikation von Operatoren in Vektorverbänden. **(82b:47048)**
- Szulga, Jerzy Regularity of Banach lattice valued martingales. **(82d:60082)**
- Talagrand, Michel See Bourgain, Jean, **(82d:46032)**

46B99 None of the above, but in this section

- Abreu, José Luis (with Canavati, José A.) A generalization of semi-inner product spaces. (Italian summary) **82g:46049**
- Anghel, Nicolae A direct proof of the fact that $L^1(X, B, \mu)$ satisfies the strong maximum modulus principle. (Romanian. English summary) **82g:46050**
- Boyd, Michael W. (with Transue, William R.) Properties of ultraproducts. **82b:46021**
- Canavati, José A. See Abreu, José Luis, **82g:46049**
- Fremlin, D. H. Borel sets in nonseparable Banach spaces. **82g:46051**
- Godefroy, Gilles Prolongement de fonctions convexes définies sur un espace de Banach E au bidual E'' . Applications. (English summary) **82b:46022**
- Jandarov, V. O. A new method of constructing and investigating a class of B -spaces, and its application. (Russian) **82k:46034**
- Mustăța, Costică The extension of starshaped bounded Lipschitz functions. **82g:46052**
- Muthukumar, S. See Rao, Geetha S., **82b:46023**
- Rao, Geetha S. (with Muthukumar, S.) A note on the semicontinuity properties of the farthest point map. **82b:46023**
- Transue, William R. See Boyd, Michael W., **82b:46021**

secondary classifications:

- Aló, Richard A. (with de Korvin, André; Kunes, Laurence) Maps whose values are closed convex subsets of a Banach space. **(82f:28014)**
- Arazy, Jonathan Basic sequences, embeddings, and the uniqueness of the symmetric structure in unitary matrix spaces. **(82g:47034)**
- Banaś, József (with Goebel, Kazimierz) ★ Measures of noncompactness in Banach spaces. **(82f:47066)**
- Berdyshev, V. I. Variation of the norm in a problem of best approximation. (Russian) **(82c:41051)**
- Butzer, P. L. The Banach-Steinhaus theorem with rates, and applications to various branches of analysis. **(82g:41013)**
- Cho, Yeol Je (with Ha, Ki Sik; Kim, Wan Se) Strictly convex linear 2-normed spaces. **(82k:46010)**
- Dickmeis, W. (with Nessel, Rolf J.) On uniform boundedness principles and Banach-Steinhaus theorems with rates. **(82g:41014)**
- Diminnie, Charles R. (with White, Albert G.) Remarks on strict convexity and betweenness postulates. **(82k:52004)**
- Flösser, Hans O. Sequences of positive contractions on AM-spaces. **(82b:41043)**
- Goebel, Kazimierz See Banaś, József, **(82f:47066)**
- Ha, Ki Sik See Cho, Yeol Je; et al., **(82k:46010)**

- Hadžić, Olga (with Stojaković, Mila) On the existence of a solution of the system $x = H(x, y), y = K(x, y)$ in random normed spaces. (Serbo-Croatian summary) **(82b:47078)**
- Kim, Wan Se See Cho, Yeol Je; et al., **(82k:46010)**
- de Korvin, André See Aló, Richard A.; et al., **(82f:28014)**
- Kunes, Laurence See Aló, Richard A.; et al., **(82f:28014)**
- Kusano, Shinako Stochastic approximation in Banach space and its application to solution searching of random functional equations. **(82a:60097)**
- Leżajski, T. Sur le minimum des fonctionnelles dans les espaces de Banach. **(82a:90120)**
- Lim, Teck Cheong Asymptotic centers and nonexpansive mappings in conjugate Banach spaces. **(82b:47052)**
- Martinez Maurica, Javier Compactness in V -spaces. (Spanish) **(82m:46079)**
- Mursaleen Invariant means and some matrix transformations. **(82a:40010)**
- Nessel, Rolf J. See Dickmeis, W., **(82g:41014)**
- Nevesenko, N. V. Strict suns and lower semicontinuity of a metric projection in normed linear spaces. (Russian) **(82b:41039)**
- Nowak, Bogdan On the Lipschitzian retraction of the unit ball in infinite-dimensional Banach spaces onto its boundary. (Russian summary) **(82g:58008)**
- Pasicki, Lech On the Cellina theorem of nonempty intersection. **(82g:54044)**
- Paulauskas, V. I. (with Račkauskas, A.) Infinitely divisible and stable laws in separable Banach spaces. II. (Russian. Lithuanian and English summaries) **(82b:60016)**
- Peng, Jia Xiong On the recognizability of pattern sets. (Chinese. English summary) **(82a:68171)**
- Penot, Jean-Paul A characterization of tangential regularity. **(82k:41030)**
- Pisier, Gilles Un théorème sur les opérateurs linéaires entre espaces de Banach qui se factorisent par un espace de Hilbert. **(82b:47025)**
- Putnamadiah, C. See Unni, K. R., **(82c:46036)**
- Račkauskas, A. See Paulauskas, V. I., **(82b:60016)**
- Ramaswamy, S. The Lax-Milgram theorem for Banach spaces. I. **(82c:47015a)**
The Lax-Milgram theorem for Banach spaces. II. **(82c:47015b)**
- Reinov, O. I. Some remarks on the properties of Radon-Nikodým operators with applications to a problem of M. Talagrand. (Russian) **(82i:47031)**
- Reisner, Shlomo Operators which factor through convex Banach lattices. **(82k:47031)**
- Russu, G. I. Two-sided closed ideals of the algebra of linear operators in some spaces of sequences. (Russian) **(82k:47061)**
- Serban-Tofan, Doina Spaces with vector-valued norm. (Romanian. English summary) **(82j:46002)**
- Stojaković, Mila See Hadžić, Olga, **(82b:47078)**
- Unni, K. R. (with Putnamadiah, C.) On orthogonality in s.i.p. spaces. **(82c:46036)**
- Vlasov, L. P. The character of generalized and classical elements of best approximation in relation to subspaces of finite codimension. (Russian) **(82f:41045)**
- White, Albert G. See Diminnie, Charles R., **(82k:52004)**

46Cxx Inner product spaces, Hilbert spaces { For function spaces, see 46Exx. }

46C05 Geometry and topology of the spaces

- Aguilella Almer, Joaquín See Burillo López, Pedro J., **82j:46027**
- Burillo López, Pedro J. (with Aguilella Almer, Joaquín) Geometry of Gramians in Hilbert space. (Spanish. English summary) **82j:46027**
- Rassias, Themistocles M. On the theory of inner product spaces. **82f:46023**
- Stanojević, Časlav V. (with Suchanek, Ana M.) Integral identities of norms and characterization of inner product spaces. **82c:46036**
- Suchanek, Ana M. See Stanojević, Časlav V., **82c:46036**

secondary classifications:

- Abatzoglou, Theagenis Unique best approximation from a C^2 -manifold in Hilbert space. **(82b:58015)**
- Haslinger, Friedrich On the geometry in linear spaces with Hilbert norms. **(82i:46019)**
- Lannes, A. Abstract holography. **(82d:65050)**

46C10 Other properties of such spaces

- Antoine, Jean-Pierre Erratum: "Partial inner product spaces. III. Compatibility relations revisited" [J. Math. Phys. 21 (1980), no. 2, 268-279; MR 81g:46032]. **82g:46053**
- Bosznay, Á. P. Two characterizations of Hilbert space by approximation theoretical properties. **82c:46033**
- Nguyen Van Lam On Möbius transformations in a Hilbert space. **82f:46024**
- Pavlovic, Miroslav Two three-dimensional characterizations of a scalar product. (Russian) **82j:46028**
- Plans, Antonio Heterogonality of subspaces. **82a:46026**
- Vukman, J. Characterization of Hilbert space. (Serbo-Croatian summary) **82k:46035**

secondary classifications:

- Fazlyov, V. R. Construction of a cone of support functionals for a polyhedral set. (Russian) **(82c:90079)**
- Hansen, Frank Self-polar norms on an indefinite inner product space. **(82c:46034)**
- Marcus, Marvin Variations on the Cauchy-Schwarz inequality. **(82a:15026)**
- Martin, D. H. Conditional positivity of quadratic forms in Hilbert space. **(82b:49070)**
- Obi, Gabriel M. M. An algebraic extension of the Lax-Milgram theorem. **(82d:15016)**
- Pfeffer, W. F. Lorentz transformations of a Hilbert space. **(82c:53037)**
- Schempp, Walter Über einige geometrische Aspekte der Approximationstheorie. **(82c:41001)**

46C99 None of the above, but in this section

- Antoine, Jean-Pierre Indefinite metric and Poincaré covariance. **82m:46020b**

- Partial inner product spaces. IV. Topological considerations. **82m:46020a**
 Dumitrescu, Constantin Un produit scalaire probabiliste. **82m:46021**
 Keller, Hans A. On the lattice of all closed subspaces of a Hermitian space. **82j:46029**
 Putnam, C. See Unni, K. R., **82b:46036**
 Unni, K. R. (with Putnam, C.) On orthogonality in s.i.p. spaces. **82k:46036**
 Vlasov, V. V. Description of canonical coefficients of contraction of a quadratic form to a subspace of finite codimension. (Russian) **82c:46029**

secondary classifications:

- Abreu, José Luis (with Canavati, José A.) A generalization of semi-inner product spaces. (Italian summary) **(82g:46049)**
 Canavati, José A. See Abreu, José Luis, **(82g:46049)**
 Godini, G. The modulus of continuity of the set-valued metric projection. **(82h:41044)**
 Izumino, Saichi Inequalities on transforms of subspaces of a Hilbert space. **(82d:47003)**
 Kramar, Edvard Locally convex topological vector spaces with Hilbertian seminorms. **(82k:46008a)**
 Linear operators in H -locally convex spaces. **(82k:46008b)**
 Maksa, Gy. A remark on symmetric biadditive functions having nonnegative diagonalization. (Serbo-Croatian summary) **(82d:39005)**
 Phadke, S. V. (with Thakare, N. K.) A study of elements of normed algebras by means of special subsets. **(82j:46060)**
 Thakare, N. K. See Phadke, S. V., **(82j:46060)**
 Toruńczyk, Henryk Characterizing Hilbert space topology. **(82i:57016)**
 Welland, Robert Grassmann spaces in Hilbert space. **(82d:58008)**

46D05 Spaces with indefinite inner product

- Bognár, J. Nondegenerate inner product spaces spanned by two neutral subspaces. **82b:46038**
 Hansen, Frank Self-polar norms on an indefinite inner product space. **82c:46034**

secondary classifications:

- Antoine, Jean-Pierre Indefinite metric and Poincaré covariance. **(82m:46020b)**
 Doković, Dragomir Ž. Extreme rays of certain cones of Hermitian forms. **(82i:15031)**
 Riener, V. S. Extension of dual pairs of subspaces. (Russian) **(82j:47056)**

46Exx Linear function spaces and their duals [See also 30H05; for function algebras, see 46J10.]

46E05 Lattices of continuous, differentiable or analytic functions

- Collins, Heron S. Strict topologies in measure theory. **82j:46030**
 Fuchssteiner, Benno Generalized Hewitt-Nachbin spaces arising in state-space completions. **82c:46037**
 Puglisi, Mario A. Measurability and Riesz-Lebesgue spaces of real functions. (Italian. English summary) **82b:46024**
 Šiškin, A. B. See Zamiatin, V. N., **82m:46022**
 Zamiatin, V. N. (with Šiškin, A. B.) Čebyšev centers and κ -normal spaces. (Russian) **82m:46022**
 secondary classifications:
 Feldman, W. A. (with Porter, J. F.) The relative uniform convergence structure. **(82b:46008)**
 Fuchssteiner, Benno Dirichlet states. **(82b:46011)**
 Kaijser, Sten Local operators on Banach lattices. **(82a:46025)**
 Koldunov, A. V. See Veksler, A. I.; et al., **(82d:54014)**
 Makarov, B. M. (with Weber, Martin) Über die Realisierung von Vektorverbänden. III. Realisierungen mit Hilfe von Basen finiter Elemente. **(82f:46007)**
 Popa, Eugen Standard spaces of balayage-standard H -cones. **(82i:31012)**
 Porter, J. F. See Feldman, W. A., **(82b:46008)**
 Tucker, C. T. Positive operators on spaces of Baire functions. **(82i:47055)**
 Veksler, A. I. (with Zaharov, V. K.; Koldunov, A. V.) Spaces of continuous extended functions. (Russian) **(82d:54014)**
 Vervaat, Wim Une compactification des espaces fonctionnels C et D ; une alternative pour la démonstration de théorèmes limites fonctionnels. (English summary) **(82c:60008)**
 Weber, Martin See Makarov, B. M., **(82f:46007)**
 Zaharov, V. K. See Veksler, A. I.; et al., **(82d:54014)**

46E10 Topological linear spaces of continuous, differentiable or analytic functions

- Asanov, M. O. (with Veličko, N. V.) Compact sets in $C_p(X)$. (Russian) **82g:46054**
 Bierstedt, Klaus-D. The approximation-theoretic localization of Schwartz's approximation property for weighted locally convex function spaces and some examples. **82j:46031**
 Colombeau, Jean-François (with Meise, Reinhold) C^∞ -functions on locally convex and on bornological vector spaces. **82c:46037**
 Ferrera Cuesta, Juan Some properties of the space of weakly continuous functions on bounded sets of a Banach space. (Spanish. English summary) **82c:46035**
 Ganapathy Iyer, V. A note on the space of integral functions. **82b:46039**
 Kadampatta, S. N. See Zaharjuta, V. P., **82a:46028**
 Katsaras, Athanasios K. Spaces of continuous functions. (French summary) **82g:46055**
 On the topologies τ_u , τ_h and τ_b of Nachbin. **82m:46023**
 Khan, Liaqat Ali The strict dual of $C(X, E_n)$. **82g:46056**
 Krasikova-Ternovskii, I. F. Spectral synthesis of analytic functions on systems of convex domains. (Russian) **82a:46027**

- Linčuk, S. S. (with Nagnibida, M. I.) Remarks on bases in some spaces of analytic functions. (Russian) **82b:46025**
 Mayer-Wolf, E. Isometries between Banach spaces of Lipschitz functions. **82c:46036**
 Meise, Reinhold See Colombeau, Jean-François, **82c:46037**
 Musielak, Julian Some problems concerning modular spaces of analytic functions. **82c:46025**

- Nagnibida, M. I. See Linčuk, S. S., **82b:46025**
 Nanda, Sudarsan (with Srivastava, P. D.; Nayak, K. C.) Certain subspaces of a Fréchet space. **82b:46040**
 Napalkov, V. V. Discrete sufficient sets in some spaces of entire functions. (Russian) **82b:46026**
 Nayak, K. C. See Nanda, Sudarsan; et al., **82b:46040**
 Patwardhan, M. D. Bornological properties of the space of integral functions. **82h:46041**
 Rao, M. M. Local functionals on $C_b(G)$ and probability. **82b:46027**
 Simonzenkov, S. D. Description of the conjugate space to the space of functions that are holomorphic in the domain of a special type. (Russian) **82c:46037**
 Srivastava, P. D. See Nanda, Sudarsan; et al., **82b:46040**
 Valdivia, Manuel On some spaces of continuous functions. (Spanish. English summary) **82g:46057**

On certain infinitely differentiable function spaces. **82d:46042**

- Veličko, N. V. See Asanov, M. O., **82g:46054**
 Zaharjuta, V. P. Isomorphism of spaces of analytic functions. (Russian) **82j:46032**
 (with Kadampatta, S. N.) Existence of countable bases in spaces of functions that are analytic on compacta. (Russian) **82a:46028**

secondary classifications:

- Ahadov, R. A. On the convergence of sequences of linear operators in a space of functions that are analytic in the disc. (Russian. Azerbaijani and English summaries) **(82k:47043)**
 Anselmi, J. M. (with Ponte, S.) An example of a quasinormable Fréchet function space which is not a Schwartz space. **(82i:46004)**
 Balikov, G. I. On the duality of the spaces of solutions of linear hypoelliptic equations and systems with constant coefficients. (Russian. Bulgarian and English summaries) **(82a:35023)**
 Brudnyi, Ju. A. Rational approximation and exotic Lipschitz spaces. **(82f:41022)**
 Child, James D. Periodic-type functionals and their extensions. **(82i:30038)**
 Collins, Heron S. Strict topologies in measure theory. **(82j:46030)**
 Dineen, Sean Topological properties inherited by certain subspaces of holomorphic functions. **(82m:46050)**
 Gorgula, V. I. (with Nagnibida, M. I.) The completeness of a system in the space of functions analytic in an annulus. (Russian. English summary) **(82f:30006)**
 Jevtić, M. Spaces defined by the operators L_p^* and J_p^* . (Serbo-Croatian. English summary) **(82f:30042)**
 Kondrat'ev, Ju. G. Nuclear spaces of entire functions in problems of infinite-dimensional analysis. (Russian) **(82c:46052)**
 Korenblum, Boris Cyclic elements in some spaces of analytic functions. **(82j:30074)**
 Korobeinik, Ju. F. A criterion of being a basis for a system of functions. (Russian) **(82b:30005)**
 (with Leont'ev, A. F.) On the property of inward continuability of representing systems of exponentials. (Russian) **(82c:30006)**
 Representative systems. (Russian) **(82c:46014)**
 Langenbruch, Michael Dualraum und Topologie der (lokal) langsam wachsenden Nulllösungen hypoelliptischer Differentialoperatoren. (English summary) **(82d:35037)**
 Leont'ev, A. F. See Korobeinik, Ju. F., **(82c:30006)**
 Llavona, José G. Approximations of differentiable functions. **(82b:46057)**
 Lutzer, David J. (with McCoy, R. A.) Category in function spaces. I. **(82k:54019)**
 McCoy, R. A. See Lutzer, David J., **(82k:54019)**
 Nagnibida, M. I. See Gorgula, V. I., **(82f:30006)**
 Păltineanu, Gavril A Stone-Weierstrass theorem for Lindenstrauss-Wulbert subspaces with weights. (Romanian. English summary) **(82m:41035)**
 Pavlovskii, D. S. Spaces of continuous functions. (Russian) **(82c:54014)**
 Ponte, S. See Anselmi, J. M., **(82i:46004)**
 Roth, Walter Abstrakte Choquet-Ordnung auf einer kompakten Menge. [Abstract Choquet ordering on a compact set] **(82k:46021)**
 Surjit Singh Khurana Dunford-Pettis property for strict topologies. (See **82g:28002**)
 Valdivia, Manuel A representation of the space \mathcal{E}_M . **(82i:46057)**
 Wilansky, Albert Mazur spaces. **(82f:46001)**

46E15 Banach spaces of continuous, differentiable or analytic functions

- Barakat, M. F. A. On linear functionals in the space H_p , $p < 1$. (Arabic summary) **82m:46024**
 Benyamini, Y. Small into-isomorphisms between spaces of continuous functions. **82j:46033**
 Bombal Górdon, F. Spaces of differentiable functions with the approximation property. (Spanish. English summary) **82h:46042**
 Bosznay, A. P. Remarks on the unique farthest point problem in some subspaces of C . **82g:46058**
 Caljuk, I. M. Some extremal problems for Hardy classes of vector-valued functions. (Russian) **82f:46026**
 Cambern, Michael (with Pathak, Vijay D.) Isometries of spaces of differentiable functions. **82b:46043**
 Carleson, Lennart An explicit unconditional basis in H^1 . (French summary) **82b:46028**
 Ch'en, Wu Yung Lipschitz spaces of holomorphic functions over bounded symmetric domains in C^N . **82j:46034**
 Christensen, Jens Peter Reus (with Pachl, Jan K.) Measurable functionals on function spaces. (French summary) **82j:46035**
 Ditzian, Z. Lipschitz classes and convolution approximation processes. **82i:46038**
 Fisher, S. D. (with Morris, Peter D.; Wulbert, D. E.) Unique minimality of Fourier projections. **82c:46038**

- Godefroy, Gilles Éléments alternés dans les sous-espaces de $\mathcal{C}(K)$ [d'après J. Voigt]. (82c:46030)
- Gorin, E. A. See Vinogradov, S. A.; et al., 82b:46039
- Hruščëv, S. V. See Vinogradov, S. A.; et al., 82c:46039
- Jandarov, V. O. Weak and quasiform convergence in generalized Hölder spaces. (Russian. Georgian and English summaries) 82g:46059
- Juneja, O. P. (with Srivastava, B. L.) On a Banach space of a class of Dirichlet series. 82i:46039
- von Keviczky, Attila Bela Eine radiale Charakterisierung von $H^p(\Pi_+)$. 82m:46025
- Kotočigov, A. M. See Vinogradov, S. A., 82b:46040
- Makai, E., Jr. Correction to my paper: "The space of bounded maps into a Banach space" [Publ. Math. Debrecen 19 (1972), 177–179 (1973); MR 48 #6911]. 82g:46060
- Morris, Peter D. See Fisher, S. D.; et al., 82c:46038
- Pachl, Jan K. See Christensen, Jens Peter Reus, 82j:46035
- Pathak, Vijay D. Isometries of $C^{(n)}[0, 1]$. 82i:46040
- See also Cambern, Michael, 82b:46043
- Pol, Roman A theorem on the weak topology of $C(X)$ for compact scattered X . 82f:46027
- Ridulescu, Sorin Critères de dimension finie pour les sous-espaces linéaires de fonctions continues sur un espace compact. 82b:46044
- Sivasubramanian, K. See Unni, K. R., 82j:46036
- Solomjak, M. Z. See Ulare, Saion, 82a:46029
- Srivastava, B. L. See Juneja, O. P., 82b:46039
- Tsubouchi, Akio A note on completeness of the space of continuous functions. 82h:46045
- Ularé, Saion (with Solomjak, M. Z.) Spaces dual to the spaces Λ_p . (Russian. English summary) 82a:46029
- Unni, K. R. (with Sivasubramanian, K.) On the space of functions whose n th differences satisfy Lipschitz condition. 82j:46036
- Vasil'čenko, A. A. Korovkin systems in some function spaces. (Russian) 82c:46031
- Vinogradov, S. A. On free interpolation in Bergman spaces. (Russian. English summary) 82c:46038
- (with Gorin, E. A.; Hruščëv, S. V.) Free interpolation in H^∞ in the sense of P. Jones. (Russian. English summary) 82c:46039
- (with Kotočigov, A. M.) Some remarks on interpolation by analytic functions that belong to Besov spaces B_p^0 . (Russian. English summary) 82k:46040
- Wheeden, Richard L. On the dual of weighted $H^1(|z| < 1)$. 82a:46030
- Wheeler, Robert F. Weak and pointwise compactness in the space of bounded continuous functions. 82f:46028
- Wulbert, D. E. See Fisher, S. D.; et al., 82c:46038
- secondary classifications:
- Airapetjan, G. M. Representation of certain subclasses of Hardy's class H^1 by means of systems of rational fractions. (Russian. Armenian and English summaries) (82c:30056)
- Alspach, Dale E. (with Benyamini, Y.) $C(K)$ quotients of separable \bar{E}_∞ spaces. (82j:46017)
- Benyamini, Y. See Alspach, Dale E., (82j:46017)
- Berkolaiko, M. Z. On an operator of conjugation in spaces of Hölder type. (Russian. Georgian and English summaries) (82g:45009)
- Bernard, Alain Le dual de H^1 n'est pas BMO. (82c:42019)
- Buck, R. Creighton The solutions to a smooth PDE can be dense in $C[1]$. (82k:41011)
- Chaumat, Jacques Quelques propriétés du préduel de H^∞ . (82c:46072)
- Cheney, E. W. See Franchetti, Carlo, (82f:41042)
- Fonf, V. P. A property of spaces of continuous functions on segments of ordinals. (Russian) (82i:46034)
- Franchetti, Carlo (with Cheney, E. W.) Simultaneous approximation and restricted Chebyshev centers in function spaces. (82f:41042)
- Fujimoto, Takao Nonlinear complementarity problems in a function space. (82k:90117)
- Grimble, M. J. See Jukes, K. A., (82g:93054)
- Gvaradze, M. I. Multipliers of a class of analytic functions, defined on a polydisc. (Russian) (82f:32010)
- Jandarov, V. O. A new method of constructing and investigating a class of B -spaces, and its application. (Russian) (82k:46034)
- Jukes, K. A. (with Grimble, M. J.) A note on a compatriot of the real Marcinkiewicz space. (82g:93054)
- von Keviczky, Attila Bela Radiale Darstellbarkeit im Dualraum von $H^p(\Pi_+)$. (82c:30053)
- Mitchell, Josephine Lipschitz spaces of holomorphic and pluriharmonic functions on bounded symmetric domains in \mathbb{C}^N ($N > 1$). (82i:32061)
- Pol, Roman On a question of H. H. Corson and some related problems. (82a:46022)
- Rode, L. O. Simple multidimensional singular integrals in classes $H_{\omega, \beta}^s$. (Russian) (82g:42016)
- Szarek, Stanisław Bases and biorthogonal systems in the spaces C and L^1 . (82m:46018)
- Tkačenko, V. A. Spectral theory in spaces of analytic functionals for operators generated by multiplication by the independent variable. (Russian) (82f:47046)
- Vlasov, L. P. Approximate properties of subspaces of finite codimension in $C(Q)$. (Russian) (82b:41027)
- Wojtaszczyk, P. On projections in spaces of bounded analytic functions with applications. (82a:46059)
- 46E20 Hilbert spaces of continuous, differentiable or analytic functions
- Schempp, Walter On Schwartz kernels relative to the function space $\mathcal{K}_{-\infty}(E)$. 82i:46041
- secondary classifications:
- de Branges, Louis (with Trutt, David) Quantum Cesàro operators. (82c:47039)
- Burbea, Jacob (with Masani, P.) Hilbert spaces of Hilbert space valued functions. (82j:46048)
- A Dirichlet norm inequality and some inequalities for reproducing kernel spaces. (82j:30014)
- Cartier, Pierre Une étude des covariances mesurables. (English summary) [A study of measurable covariances] (82m:60040)
- Kolaski, Clinton J. A new look at a theorem of Forelli and Rudin. (82b:32002)
- Langenbruch, Michael Darstellung von Distributionen endlicher Ordnung als Randwerte zu hypoelliptischen Differentialoperatoren. (82j:46057)
- Luecking, Daniel H. Inequalities on Bergman spaces. (82c:30072)
- Masani, P. See Burbea, Jacob, (82j:46048)
- Patton, C. M. On representations in cohomology over pseudo-Hermitian symmetric spaces. (82j:81035)
- Sato, Hiroshi Gaussian measurable dual and Bochner's theorem. (82b:60012)
- Trutt, David See de Branges, Louis, (82c:47039)
- 46E25 Rings and algebras of continuous, differentiable or analytic functions {For Banach function algebras, see 46J10, 46J15.}
- Bosznay, Á. P. A remark on universal spaces. 82g:46061
- Bruna, Joaquim On inverse-closed algebras of infinitely differentiable functions. 82c:46039
- Martinez Carracedo, Celso (with Sanz Alix, Miguel A.) Multiplicative linear forms on certain subrings of $\mathcal{C}(X)$. (Spanish) 82b:46046
- Sanz Alix, Miguel A. See Martinez Carracedo, Celso, 82b:46046
- secondary classifications:
- Artico, Giuliano (with Le Donne, Attilio; Moresco, Roberto) Algebras of real-valued uniform maps. (82f:54023)
- Blasco, José Luis Some results on Wallman rings. (Spanish. English summary) (82d:44013)
- Komornik, V. On the Korovkin closure. (82g:41023)
- Le Donne, Attilio See Artico, Giuliano; et al., (82f:54023)
- Lorch, Edgar R. On some properties of the metric subalgebras of l^∞ . (82k:54037)
- Marshall, Donald E. (with O'Farrell, Anthony G.) Uniform approximation by real functions. (82j:41035)
- Martinez Carracedo, Celso On certain compactifications of Frink. (Spanish) (82j:54038)
- Mason, Gordon Prime z -ideals of $C(X)$ and related rings. (82c:54013)
- Moresco, Roberto See Artico, Giuliano; et al., (82f:54023)
- Murzin, F. A. Elementary equivalence of rings of continuous functions. (Russian) (82c:03049)
- O'Farrell, Anthony G. Five generalisations of the Weierstrass approximation theorem. (82k:44004)
- See also Marshall, Donald E., (82j:41035)
- Sidney, S. J. Quotients of $C(X)$ by uniform algebras. (82d:46074)
- 46E27 Spaces of measures [See also 28A33.]
- Graves, William H. (with Ruess, Wolfgang) Compactness in spaces of vector-valued measures and a natural Mackey topology for spaces of bounded measurable functions. 82j:46037
- Koumoullis, G. Some topological properties of spaces of measures. 82k:46041
- McKennon, Kelly (with Richardson, Gary D.) Convergence of certain probability distribution functions. 82b:46029
- Richardson, Gary D. See McKennon, Kelly, 82b:46029
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- Valdivia, Manuel Spaces of Radon measures. (Spanish. English summary) 82c:46040
- secondary classifications:
- Aló, Richard A. (with de Korvin, André) Nonlinear integration on measures. (82g:47045)
- Boman, Jan Equivalence of generalized moduli of continuity. (82m:42012)
- Brook, Cecilia H. (with Graves, William H.) Closed measures. (82g:28014)
- Christensen, Jens Peter Reus (with Pachl, Jan K.) Measurable functionals on function spaces. (French summary) (82j:46035)
- Collins, Heron S. Strict topologies in measure theory. (82j:46030)
- Graves, William H. See Brook, Cecilia H., (82g:28014)
- de Korvin, André See Aló, Richard A., (82g:47045)
- Nougués-Sainte-Beuve, M.-F. Espaces de Lindelöf et quelques propriétés topologiques des espaces de mesures. (82m:28004)
- Pachl, Jan K. See Christensen, Jens Peter Reus, (82j:46035)
- Schnabl, Roman Die Algebra der Bernsteinoperatoren und symmetrische Funktionen. (82b:46060)
- Sleijpen, Gerard L. G. The dual of the space of measures with continuous translations. (82b:43007)
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- Wheeler, Robert F. Weak and pointwise compactness in the space of bounded continuous functions. (82f:46028)
- 46E30 Spaces of measurable functions (L^p -spaces, Orlicz spaces, Köthe function spaces, Lorentz spaces, rearrangement invariant spaces, etc.)
- Ahmedov, Saidamir Ahmedovič The sharpness of estimates with the symbol σ for some sequences of linear functionals in L_p . (Russian) 82c:46032
- Álvarez Alonso, Josefina The distribution function in the Morrey space. 82k:46042
- Andersen, Kenneth F. Inequalities for scalar-valued linear operators that extend to their vector-valued analogues. 82b:46030
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- Baloghskii, V. S. Weak continuity of the metric projection on finite-dimensional spaces in $L_p(\mu)$. (Russian) **82d:46043**
- Bennett, Colin (with DeVore, Ronald A.; Sharpley, Robert) Weak- L^p and BMO. **82c:46047**
- Berezin, B. I. See Bahvalov, N. S.; et al., **82e:46041**
- Bessonov, Ju. L. See Bahvalov, N. S.; et al., **82e:46041**
- Bombal Gordin, F. On the space $L^p(\mu, X)$. (Spanish. English summary) **82i:46042**
- Bourgain, Jean Complémentation de sous-espaces L^1 dans les espaces L^1 . **82h:46031**
- Walsh subspaces of L^p -product spaces. **82h:46048**
- Braverman, M. S. (with Semenov, E. M.) Characteristic properties of \mathcal{E}_p spaces. (Russian) **82h:46032**
- (with Sedav, A. A.) On a characteristic of symmetric spaces. (Russian) **82j:46038**
- Buhvalov, A. V. (with Lozanovskii, G. Ja.) Representations of linear functionals and operators on vector lattices and certain applications of these representations. (Russian) **82d:46044**
- Bund, Iracema Maria ★ Birnbaum-Orlicz spaces. **82e:46042**
- Candeloro, Domenico (with Pucci, Patrizia) A criterion for weak compactness in the sense of Dunford and Pettis. (Italian. English summary) **82d:46045**
- Carleson, Lennart BMO—10 years' development. **82h:46043**
- Castaing, Charles Topologie de la convergence uniforme sur les parties uniformément intégrables de L^1_E et théorèmes de compacité faible dans certains espaces du type Köthe-Orlicz. **82h:46044**
- Chalmers, Bruce L. Formulas for minimal projections. **82e:46043**
- Clauser, Paulette Représentation intégrale à l'aide d'intégrande de Carathéodory d'opérateurs additifs sur des espaces de type Köthe-Orlicz. **82h:46045**
- DeVore, Ronald A. See Bennett, Colin; et al., **82h:46047**
- Dor, L. E. (with Starbird, T.) Projections of L_p onto subspaces spanned by independent random variables. **82e:46043**
- van Eldik, Peter See Grobler, Jacobus J., **82h:46048**
- Fehr, F. A note on weak-type interpolation and function spaces. **82h:46033**
- Fennich, Rachida Stricte convexité de la norme modulaire des espaces intégraux de type Orlicz et Δ_2 -condition. **82h:46046**
- Friedrich, Wojciech Some contributions to the theory of modular spaces. I. **82f:46029**
- Gaspur, Dumitru On interpolation of weak-type operators. **82g:46063**
- Gillespie, T. A. Factorization in Banach function spaces. **82h:46047**
- Gorgadze, Z. G. (with Tarieladze, V. I.) On geometry of Orlicz spaces. **82h:46049**
- Grobler, Jacobus J. (with van Eldik, Peter) A note on a paper: "Convergence in normed Köthe spaces" [J. Singapore Nat. Acad. Sci. 4 (1975), no. 3, 146–148; MR 52 #11568] by Peng Nung Ng and Peng Yee Lee. **82h:46048**
- Hernández Rodríguez, Francisco On locally bounded Orlicz spaces $L^p(X, \mu, E)$. (Spanish. English summary) **82h:46034**
- Herrndorf, Norbert Counterexamples to results of M. M. Rao. **82f:46030**
- Best Φ - and N_p -approximations in Orlicz spaces of vector valued functions. **82h:46026**
- Hudzik, H. (with Musielak, Julian; Urbanski, Ryszard) Some extensions of the Riesz-Thorin theorem to generalized Orlicz spaces $L^p_\lambda(T)$. **82d:46046**
- Jaroszewska, Magdalena On interpolation in the $L^{p,\lambda}$ -spaces with mixed norms. **82c:46033**
- Johnson, William B. Complemented subspaces of L_p which embed into $l_p \oplus l_2$. **82d:46047**
- Jones, Peter W. Factorization of A_p weights. **82h:46035**
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- Sultanbekov, F. F. Weak random functionals on a space of strongly measurable functions. (Russian) 82c:46046
- secondary classifications:
- Andrews, Kevin T. Representation of compact and weakly compact operators on the space of Bochner integrable functions. (82k:47044)
- Behrends, Ehrhard T -sets in function modules and an application to theorems of the Banach-Stone type. (82d:46021)
- (with Schmidt-Bichler, Ursula) M -structure and the Banach-Stone theorem. (82d:46020)
- Helmer, Dietrich Criteria for Eberlein compactness in spaces of continuous functions. (82j:54020)
- Hudzik, H. (with Musielak, Julian; Urbanski, Ryszard) Some extensions of the Riesz-Thorin theorem to generalized Orlicz spaces $L_{\Phi}(T)$. (82d:46046)
- Johnson, Jerry A. Strongly exposed points in $L^p(\mu, E)$. (82a:41032)
- Kaballo, Winfried Lifting-Sätze für Vektorfunktionen und (εL) -Räume. (82k:46099)
- Kozek, Andrzej Convex integral functionals on Orlicz spaces. (82c:46058)
- Musielak, Julian See Hudzik, H.; et al., (82d:46046)
- Nakazi, Takahiko A note on the factorization of operator-valued functions. (82c:47019)
- Phan Van Chu'o'ng Densité des sections extrémales d'une multiapplication mesurable. (82c:46059)
- Rao, M. M. Structure and convexity of Orlicz spaces of vector fields. (82g:46065)
- Rosinski, Jan (with Suchanecki, Zdzislaw) On the space of vector-valued functions integrable with respect to the white noise. (82g:60009)
- Šaškin, Ju. A. The moment problem in spaces of vector-valued continuous functions. (Russian) (82f:44005)
- Schmidt-Bichler, Ursula See Behrends, Ehrhard, (82d:46020)
- Suchanecki, Zdzislaw See Rosinski, Jan, (82g:60009)
- Urbanski, Ryszard See Hudzik, H.; et al., (82d:46046)
- Weit, Yitzhak Spectral analysis in spaces of vector valued functions. (82m:43007)
- 46E99 None of the above, but in this section
- Argyros, S. (with Negreponis, S.) Universal embeddings of l_n^1 into $C(X)$ and $L^\infty(\mu)$. 82c:46054
- Krasčkov-Ternovskii, I. F. Spectral synthesis on systems of convex domains. Extension of the synthesis. (Russian) 82d:46058
- Negreponis, S. See Argyros, S., 82c:46054
- Podporin, V. P. Operators that commute with polynomials of differentiation and sequences of Appell type. (Russian) 82f:46044
- Rao, M. M. Local functionals. 82a:46038
- Soler, V. N. Letter to the editors: "Absolutely regular trajectories in Hilbert space" [Zap. Naučn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 22 (1971), 139-160; MR 46 #9721]. (Russian) 82i:46056
- Toader, Gh. Some metrics for function spaces. 82j:46050
- secondary classifications:
- Banaś, Józef Measures of noncompactness in the space of continuous tempered functions. (82j:47084)
- Boboc, Nicu (with Bucur, Gheorghe; Cornea, Aurel) ★ Order and convexity in potential theory: H -cones. (82i:31011)
- Bucur, Gheorghe See Boboc, Nicu; et al., (82i:31011)
- Capon, Michèle Primarité de $l_p(L^1)$, $1 \leq p < \infty$. (English summary) (82m:46015)
- Chan, L. Y. (with Chen, Yung-Ming; Liu, Ming Chit) Some properties of asymptotic functions. (82g:26005)
- Chen, Yung-Ming See Chan, L. Y.; et al., (82g:26005)
- Chu, C. I. See Lee, Y. L.; et al., (82k:58027)
- Coifman, R. R. (with Rochberg, R. H.) Representation theorems for holomorphic and harmonic functions in L^p . (82j:32015)
- Cornea, Aurel See Boboc, Nicu; et al., (82i:31011)
- Falconer, K. J. Function space topologies defined by sectional integrals and applications to an extremal problem. (82d:52010)
- Frölicher, Alfred Applications lisses entre espaces et variétés de Fréchet. (English summary) [Smooth maps between Fréchet spaces and manifolds] (82d:58017)
- Goldman, André (with Talagrand, Michel) Propriétés de Radon-Nikodym pour les cônes positifs de mesures. (82k:28016)
- Guseinov, A. I. (with Muhtarov, H. Š.) ★ Введение в теорию нелинейных сингулярных интегральных уравнений. (Russian) [Introduction to the theory of nonlinear singular integral equations] (82g:45013)
- (Höllein, Herbert) See Boboc, Nicu; et al., (82i:31011)
- Jones, Peter W. Ratios of interpolating Blaschke products. (82m:30032)
- Kaidan, V. O. (with Pohilevič, V. O.) On boundaries of α -convexity for subclasses of starlike functions of β kind. (Russian. English summary) (82k:30013)
- Lassoued, L. Espaces de Dirichlet et axiomatique de Brelot. (82d:31012)
- Lee, Y. L. (with Chu, C. I.; Miao, L. C.) On spaces of $C(r, s)$ differentiable maps. (82k:58027)
- Liu, Ming Chit See Chan, L. Y.; et al., (82g:26005)
- Maitani, Fumio Remarks on the isomorphisms of certain spaces of harmonic differentials induced from quasiconformal homeomorphisms. (82c:30068)
- Miao, L. C. See Lee, Y. L.; et al., (82k:58027)
- Morimoto, Hiroaki The space BMO and optimal exponential martingales. (82j:60078)
- Muhtarov, H. Š. See Guseinov, A. I., (82g:45013)
- Pohilevič, V. O. See Kaidan, V. O., (82k:30013)
- Qin, Guo Guang Fuzzy approximation theory. I. The fuzzy space $FL_p(X)$ and a commentary on the selection-nearness principle. (Chinese. English summary) (82a:03054)
- Rochberg, R. H. See Coifman, R. R., (82j:32015)
- Runst, Thomas (with Sickel, Winfried) On strong summability of Jacobi-Fourier-expansions and smoothness properties of functions. (82k:42016)
- Semadeni, Zbigniew Some Saks-space dualities in harmonic analysis on commutative semigroups. (82h:43007)
- Sickel, Winfried See Runst, Thomas, (82k:42016)
- Stegenga, David A. (with Stephenson, Kenneth) A geometric characterization of analytic functions with bounded mean oscillation. (82m:30036)

- Stephenson, Kenneth See Stegenga, David A., (82m:30036)
 Talagrand, Michel See Goldman, André, (82i:28016)
 Varopoulos, Nicholas Th. A probabilistic proof of the Garnett-Jones theorem on BMO. (82f:60181)
 Zaharov, V. K. The construction of all locally compact extensions. (82h:54015)

46Fxx Distributions, generalized functions, distribution spaces (For distribution theory on nonlinear spaces, see 58Cxx.)

- Fattorini, H. O. Structure theorems for vector-valued ultradistributions. 82f:46045
 Vector-valued distributions having a smooth convolution inverse. 82f:46046

46F05 Topological linear spaces of test functions and distributions

- Arpad, Takač On a class of distributions and asymptotic behavior. (Serbo-Croatian summary) 82g:46076
 Carmichael, Richard D. Analytic functions related to the distributions of exponential growth. 82d:46059
 Dierolf, Peter (with Voigt, Jürgen) Calculation of the bidual for some functions spaces. Integrable distributions. 82d:46060
 Kašpirovskii, O. I. Realization of some spaces of type S as spaces of sequences. (Ukrainian. English and Russian summaries) 82j:46051
 Kierat, Władysław ★Applications of quadratic forms generated by Sturm-Liouville operators in the theory of generalized functions. 82g:46077
 Nakanishi, Shizuo Main spaces in distribution theory treated as ranked spaces and Borel sets. 82k:46057
 Ortner, Norbert Faltung hypersingulärer Integraloperatoren. 82b:46047
 Pap, Endre An application of J. Mikusiński's lemma on convergence. (Serbo-Croatian summary) 82e:46055
 Pilipović, Stevan On convergence in some subspaces of generalized functions. 82g:46078
 Poornima, S. Multiplicateurs des espaces de Sobolev. (English summary) 82c:46047
 Shanker, Hari On the generalized functions of slow growth. 82b:46048a
 On the generalized functions of slow growth. II. 82b:46048b
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 A representation of the space $\mathcal{D}'_s(\Omega)$. (Spanish. English summary) 82m:46038
 A representation of the space $\mathcal{D}'_s(K)$. 82j:46052
 On the space $\mathcal{D}'_s(\Omega)$. (Spanish. English summary) 82j:46053
 A representation of the space \mathcal{D}'_M . 82i:46057
 Voigt, Jürgen See Dierolf, Peter, 82d:46060
 Wang, Qiao Ling (with Song, Guo Zhu) A property of $\{M_k\}$ and its associated function. (Chinese. English summary) 82f:46047
 Wulfsch, Aubrey Produit tensoriel d'espaces de Fréchet nucléaires. 82a:46039

secondary classifications:

- Ciorănescu, Ioana Convolution equations in ω -ultradistribution spaces. (82f:46048)
 Colombeau, Jean-François (with Meise, Reinhold) C^∞ -functions on locally convex and on bornological vector spaces. (82k:46037)
 Dierolf, Peter (with Dierolf, Susanne) Some spaces are not the domain of a closed linear operator in a Banach space. (82f:47003)
 Dierolf, Susanne See Dierolf, Peter, (82f:47003)
 Hansen, Sönke Localizable analytically uniform spaces and the fundamental principle. (82f:35047)
 Hvoles, A. A. See Maz'ja, V. G., (82j:46045)
 Langenbruch, Michael Dualraum und Topologie der (lokal) langsam wachsenden Nulllösungen hypelliptischer Differentialoperatoren. (English summary) (82d:35037)
 Lomsadze, Ju. M. (with Sabad, O. P.) Abstract concentratable and reducible linear functionals and generalized functions. (82h:81077)
 Maz'ja, V. G. (with Hvoles, A. A.) Imbedding of the space $L^1_p(\Omega)$ into a space of generalized functions. (Russian) (82f:46045)
 Meise, Reinhold See Colombeau, Jean-François, (82k:46037)
 Mitoma, Itaru Martingales of random distributions. (82e:60079)
 Petzsche, H.-J. Some results of Mittag-Leffler-type for vector valued functions and spaces of class \mathcal{L} . (82a:46043)
 Sabad, O. P. See Lomsadze, Ju. M., (82h:81077)
 Valdivia, Manuel On certain infinitely differentiable function spaces. (82d:46042)

46F10 Operations with distributions

- Berg, Lothar Differentiationsalgebren für Distributionen. 82c:46048
 Distributionenalgebren mit Wurzeln. 82h:46056
 Ciorănescu, Ioana Convolution equations in ω -ultradistribution spaces. 82f:46048
 Damjanov, Bl. P. See Hristov, Hristo Ja., 82m:46040
 Dudley, Richard M. Acknowledgment of priority: "On second derivatives of convex functions" [Math. Scand. 41 (1977), no. 1, 159-174; MR 58 #2250]. 82d:46061
 Fisher, Brian On defining the product of distributions. 82k:46058
 A theorem on the product of distributions. 82d:46062
 González Domínguez, A. On some heterodox distributional multiplicative products. 82d:46063
 von Grudzinski, Olaf (with Hansen, Sönke) Über Wellenfrontmengen von Distributionen und singuläre Träger von Faltungen. 82k:46059
 Hansen, Sönke See von Grudzinski, Olaf, 82k:46059
 Hristov, Hristo Ja. (with Damjanov, Bl. P.) Asymptotic functions—a new class of generalized functions. I. General formulation and definition. (Russian. English summary) 82m:46040a
 (with Damjanov, Bl. P.) Asymptotic functions—a new class of generalized functions. II. Existence of the functions and uniqueness of their expansions. (Russian. English summary) 82m:46040b
 (with Damjanov, Bl. P.) Asymptotic functions—a new class of generalized functions. III. General definition of operations on them, linear operations. (Russian. English summary) 82m:46040c
 (with Damjanov, Bl. P.) Asymptotic functions—a new class of generalized functions. IV. Multiplication, linear functional. (Russian. English summary) 82m:46040d
 (with Damjanov, Bl. P.) Asymptotic functions—a new class of generalized functions. V. Fourier transformation. (Russian. English summary) 82m:46040e
 (with Damjanov, Bl. P.) Asymptotic functions—a new class of generalized functions. VI. Representatives of the Fourier transforms in the set of ordinary functions. (Russian. English summary) 82m:46040f
 Ishikawa, Shiro Some remark on Tauberian theorem. 82m:46039
 Ivanov, V. K. Multiplication of homogeneous generalized functions of several variables. (Russian) 82e:46056
 Kytmanov, A. M. A class of multidimensional distributions. (Russian) 82d:46064
 Lesmes, Jaime Uniqueness classes of the Cauchy problem for convolution operators. (Spanish) 82g:46079
 Marshall, Bernard Differentiability of distributions at a single point. 82j:46054
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 Meyer, Yves Multiplication of distributions. 82m:46045
 Munster, M. (with Wuidar, J.) Majoration de type analytique pour une intégrale particulière. (English summary) 82e:46057
 Nott, David Definite integrals of generalized functions. 82a:46040
 Ortner, Norbert Regularisierte Faltung von Distributionen. I. Zur Berechnung von Fundamentallösungen. (English summary) 82e:46058a
 Regularisierte Faltung von Distributionen. II. Eine Tabelle von Fundamentallösungen. (English summary) 82e:46058b
 Piazz, Piero Elements of algebras $\mathcal{D}' \otimes \mathcal{D}'(\mathbb{R}^n)$ as linear functionals. (Italian summary) 82b:46049
 Putinar, Mihai A remark on the sheaf of distributions. (Romanian. French summary) 82j:46055
 Richards, Ian See Youn, Heekyung Kang, 82d:46065 and 82f:46049
 Sadlok, Zbigniew (with Tyc, Zygmunt) Remarks on rapidly increasing distributions. (Russian summary) 82i:46058
 Šarin, V. I. Analytic continuation with respect to a parameter and multiplication of generalized functions. (Russian) 82m:46043
 See also Zavalishin, S. T., 82f:46050
 Šelković, V. M. Multiplications of distributions generated by Wightman functions, and an algebra of hyperdistributions. (Russian) 82m:46044
 Širokov, Ju. M. See Tolokomnikov, G. K., 82j:46056
 Skórnik, Krystyna On the fractional integrals and derivatives of a class of generalized functions. (Russian) 82c:46049
 Struble, Raimond A. Functions which are Fourier transforms of distributions. 82d:46046
 Szász, Arpad Inversion in the multiplier extension of admissible vector modules. 82k:46060
 Todorov, T. D. Asymptotic functions and the problem of multiplication of distributions. (Russian summary) 82m:46041
 Extended asymptotic functions—some examples. (Russian summary) 82m:46042
 Tolokomnikov, G. K. (with Širokov, Ju. M.) An associative algebra of generalized functions, closed with respect to differentiation and taking primitives. (Russian. English summary) 82j:46056
 Tyc, Zygmunt See Sadlok, Zbigniew, 82i:46058
 Verbalović, T. A. Associative multiplication of certain homogeneous generalized functions. (Russian) 82k:46061
 Wuidar, J. See Munster, M., 82e:46057
 Yger, Alain Systèmes de distributions à support fini et à spectre discret. (English summary) 82e:46059
 Youn, Heekyung Kang (with Richards, Ian) On the general definition of convolution for distributions. 82d:46065
 (with Richards, Ian) On the general definition of convolution for several distributions. 82f:46049
 Zavalishin, S. T. (with Šarin, V. I.) A construction of multiplication of generalized functions, and its application to singular differential equations. (Russian) 82f:46050

secondary classifications:

- Abdurahmanov, R. Spectra of some convolution equations in spaces of generalized functions. (Russian. Tajiki summary) (82j:45008)
 Barbey, Klaus (with Hackenbroch, Wolfgang; Willie, Helmut) Partially translation invariant linear systems. (82h:93044)
 Brüning, Erwin The n -field-irreducible part of an n -point functional. (French summary) (82i:81070)
 Caljuk, V. Z. Perturbations of exponentially stable differential inclusions by generalized functions. (Russian) (82j:34012)
 Carmichael, Richard D. (with Hayashi, Elmer K.) Analytic functions in tubes which are representable by Fourier-Laplace integrals. (82f:32006)
 Chazarain, Jacques (with Piriou, Alain) ★Introduction à la théorie des équations aux dérivées partielles linéaires. (French) [Introduction to the theory of linear partial differential equations] (82i:35001)
 Ciorănescu, Ioana (with Zsidó, László) ω -ultradistributions in the abstract Cauchy problem. (82c:47042)
 Daubechies, Ingrid On the distributions corresponding to bounded operators in the Weyl quantization. (82d:81025)
 Ehrenpreis, Leon Reflection, removable singularities, and approximation for partial differential equations. I. (82a:35024)
 Hackenbroch, Wolfgang See Barbey, Klaus; et al., (82h:93044)
 Hansen, Sönke Uniqueness of the Cauchy problem for convolution equations. (82k:35001)
 Hayashi, Elmer K. See Carmichael, Richard D., (82f:32006)

- Heynig, Frank. Ein zweidimensionaler Operatoralkül. (82b:44008)
- Janssen, A. J. E. M. Weighted Wigner distributions vanishing on lattices. (82i:81040)
- Kammerer, Jean-Bertrand. Algèbres de fonctions définies par le produit déformé sur une variété symplectique plate. (English summary) (82d:81029)
- Koebeli, A. N. Operator-differential equations in spaces of ultradistributions. (Russian) (82d:34063)
- Llamosi, Albert. A method for the calculus of Bernstein's polynomial. (82c:33017)
- Luk'janenko, V. A. An equation of smooth transition in the space of slowly growing functions. (Russian. English summary) (82d:45009)
- Marshall, Bernard. Tempered nontangential boundedness. (82c:42018)
- Meidan, R. On the connection between ordinary and generalized stochastic processes. (82d:60069)
- Nakagami, Keiko. Integration and differentiation of δ -function. I. (82i:46008)
- Pal'cev, B. V. Generalization of the Wiener-Hopf method for convolution equations of a finite interval with symbols having power asymptotic behavior at infinity. (Russian) (82i:45005)
- Pap, Endre (with Filipović, Stevan). A sequential theory of some semigroups in special spaces of generalized functions. (82i:47067)
- Pfaff, Rainer. Generalized systems of linear differential equations. (82j:34009)
- Filipović, Stevan. See Pap, Endre, (82i:47067)
- Pirion, Alain. See Chazarain, Jacques, (82i:35001)
- Piazzi, Piero. The equations $y' = Sy + T$ and $By' = Sy + T$ with B, S, T distributions. (Italian summary) (82m:34063)
- Popa, Maria. Solution of the integral equation in $S'(\mathbb{R}^n)$. (Russian) (82m:45002)
- Sadlok, Zbigniew. On Hermite expansion of $x\xi$. (82a:33013)
- Shapiro, Harold S. On some Fourier and distribution-theoretic methods in approximation theory. (82g:41017)
- Širokov, Ju. M. Representation of free solutions for Schrödinger equations with strongly singular concentrated potentials. (Russian. English summary) (82i:81028)
- Stuart, S. N. Nonclassical integrals of Bessel functions. (82g:33021)
- Svensson, S. Leif. Singular differential operators and distributions. (82d:47050)
- Wang, Sheng Wang. $\mathcal{Q}_{(M)}$ operators and spectral operators. (Chinese summary) (82j:47055)
- Willie, Helmut. See Barbey, Klaus; et al., (82h:93044)
- Zayed, Ahmed I. On the singularities of Gegenbauer (ultraspherical) expansions. (82c:33016)
- Zielinski, A. P. On curvilinear distributions expressed by double Fourier series. (German summary) (82m:73067a)
- Errata: "On curvilinear distributions expressed by double Fourier series". (82m:73067b)
- Zsidó, László. See Ciorănescu, Ioana, (82c:47042)

46F12 Integral transforms in distribution spaces [See also 42--XX, 44--XX.]

- Bhonsle, B. R. (with Prasad, R. D.) Kontorovich-Lebedev transform of a class of generalised functions. 82b:46050
- Debnath, Lokenath. See Pathak, R. S., 82b:46051
- Pathak, R. S. (with Debnath, Lokenath). Expansions of distributions in terms of generalized heat polynomials and their Appell transforms. 82b:46051
- Prasad, R. D. See Bhonsle, B. R., 82b:46050
- Tiwari, A. K. On a distributional generalized Laplace transform. 82g:46081

secondary classifications:

- Carmichael, Richard D. (with Milton, E. O.) Abelian theorems for the distributional Stieltjes transform. (82a:44002)
- Analytic functions related to the distributions of exponential growth. (82d:46059)
- Jakovlev, Ju. S. See Slepjan, L. I., (82b:44002)
- Johnson, Raymond. Weighted estimates for fractional powers of partial differential operators. (82j:46040)
- Milton, E. O. See Carmichael, Richard D., (82a:44002)
- Pathak, R. S. The reduced Poisson-Hankel transform of generalized functions. (82i:44003)
- Filipović, Stevan. Convolution and the Laplace transform in L' . (Serbo-Croatian. English summary) (82i:44006)
- Sjölin, Per. Convolution with oscillating kernels on H^p spaces. (82h:42024)
- Slepjan, L. I. (with Jakovlev, Ju. S.) Construction of formulas for integral transforms. (Russian) (82b:44002)
- Tiwari, A. K. Some results on spaces of type $LH_{\mu,\nu}$. (82c:44001)
- Vladimirov, V. S. (with Zav'jalov, B. I.) Tauberian theorems in quantum field theory. (Russian) (82c:81072)
- Zav'jalov, B. I. See Vladimirov, V. S., (82c:81072)

46F15 Hyperfunctions, analytic functionals [See also 32A25, 32A45, 32C35, 58G07.]

- Carmichael, Richard D. The tempered ultra-distributions of J. Sebastião e Silva. 82b:46052
- Ito, Yoshifumi. Theory of analytic linear mappings. I. General theory. 82c:46050
- Morimoto, Mitsuo (with Yoshino, Kunio). Some examples of analytic functionals with carrier at infinity. 82c:46051
- An extension of e^x to $[-\infty, \infty]$. 82d:46066
- Yoshino, Kunio. See Morimoto, Mitsuo, 82c:46051
- Žarinov, V. V. Analytic representations of a class of analytic functionals that contains Fourier hyperfunctions. (Russian) 82c:46064
- Fourier-ultrahyperfunctions. (Russian) 82c:46062
- On quasiasymptotics of Fourier hyperfunctions. (Russian. English summary) 82i:46063

secondary classifications:

- Blickensdorfer-Ehlers, Arndt. \mathcal{S} -microfunctions. (82i:32019)
- Carmichael, Richard D. (with Hayashi, Elmer K.) A pointwise growth estimate for analytic functions in tubes. (82a:32002)
- Gay, Roger. Division des fonctionnelles analytiques. Applications aux fonctions entières de type exponentiel moyennes-périodiques. (82f:32006)
- Hayashi, Elmer K. See Carmichael, Richard D., (82a:32002)
- Iagolnitzer, D. Essential support theory and $u=0$ theorems. (82c:81071)
- Katoke, Kiyomi. Microlocal analysis of boundary value problems with applications to diffraction. (82m:35151)
- Kiselman, Christer O. How to recognize supports from the growth of functional transforms in real and complex analysis. (82f:32011)
- Koebeli, A. N. Hyperfunction solutions of operator differential equations. (Russian) (82g:35116)
- Langenbruch, Michael. Fortsetzung von Randwerten zu hypoelliptischen Differentialoperatoren und partielle Differentialgleichungen. (82a:35028)
- Marti, Jean-André. Théorèmes d'unicité sur les hyperfonctions analytiques par rapport à une des variables. (English summary) (82g:32012)
- Rosenblum, Arnold. The use of hyperfunctions for radiation reaction calculations in classical field theories. (82g:78006)
- Trutnev, V. M. Convolution equations in convex domains of cone type in C^n . (Russian) (82h:32004)
- Žarinov, V. V. On an exact sequence of modules and the Bogoljubov "edge of the wedge" theorem. (Russian) (82f:32012)
- Zayed, Ahmed I. Hyperfunctions as boundary values of generalized axially symmetric potentials. (82f:31002)
- Linear differential equations. ★Microfunctions and linear differential equations. VII. (Japanese) (82d:46002)
- Microfunctions and linear differential equations. ★Microfunctions and linear differential equations. VII. (Japanese) (82d:46002)
- Symposium: Microfunctions and Linear Differential Equations. ★Microfunctions and linear differential equations. VII. (Japanese) (82d:46002)

46F20 Distributions as boundary values of analytic functions [See also 30Exx, 32A40.]

- Lahtinen, Aatos. On the Poisson representation of distributions. 82d:46067
- Langenbruch, Michael. Darstellung von Distributionen endlicher Ordnung als Randwerte zu hypoelliptischen Differentialoperatoren. 82j:46057

secondary classifications:

- Buchanan, J. (with Gilbert, R. P.) The Hilbert problem for hyperanalytic functions. (82i:30068)
- Carmichael, Richard D. Distributional boundary values in $\mathcal{Q}'_{\ell,p}$. IV. (82g:32011)
- Dini, Gilberto (with Parrini, Carla). Extending CR-distributions. (Italian summary) (82h:32021)
- Gilbert, R. P. See Buchanan, J., (82i:30068)
- Parrini, Carla. See Dini, Gilberto, (82h:32021)

46F25 Distributions on infinite-dimensional spaces [See also 58C35.]

- Anselmi, J. M. (with Colombeau, Jean-François). The Paley-Wiener-Schwartz isomorphism in nuclear spaces. 82g:46082
- Colombeau, Jean-François (with Gay, Roger; Perrot, B.) Division by holomorphic functions and convolution equations in infinite dimension. 82c:46060
- See also Anselmi, J. M., 82g:46082
- Gay, Roger. See Colombeau, Jean-François; et al., 82c:46060
- Kondrat'ev, Ju. G. Nuclear spaces of entire functions in problems of infinite-dimensional analysis. (Russian) 82c:46052
- Perrot, B. See Colombeau, Jean-François; et al., 82c:46060

secondary classifications:

- Colombeau, Jean-François (with Matos, Mário C.) Convolution equations in spaces of infinite-dimensional entire functions. (82h:46058)
- Daleckiĭ, Ju. L. (with Fomin, S. V.) Differential equations for distributions in infinite-dimensional spaces. (Russian) (82c:46054)
- Fomin, S. V. See Daleckiĭ, Ju. L., (82c:46054)
- Matos, Mário C. See Colombeau, Jean-François, (82h:46058)
- Paclet, Philippe. Espaces de Dirichlet et capacités fonctionnelles sur des triplets de Hilbert Schmidt. (82k:46073)

46F99 None of the above, but in this section

- Gatto, Angel B. E. An atomic decomposition of distributions in parabolic H^p spaces. 82c:46053
- Marques, Maria Higinia Rendeiro. Vector distributions on manifolds as indicatrices of continuous linear mappings. (Portuguese) 82a:46042
- Moore, Steven M. Nonstandard analysis and generalized functions. (Spanish summary) 82c:46041
- Peck, S. N. Canonical Schwartz spaces and generalized operators. 82c:46065

secondary classifications:

- Boland, Philip J. (with Dineen, Seán). Holomorphy on spaces of distribution. (82i:46065)
- Ciorănescu, Ioana. On distribution semigroups of subnormal operators. (82h:47038)
- Colombeau, Jean-François (with Perrot, B.; Dwyer, T. A. W., III). On the solvability of differential equations of infinite order in nonmetrizable spaces. (82m:34011)

- Dineen, Seán See Boland, Philip J., (82i:46065)
 Dupuis, Christian Quasimetrics of type positif. (English summary) (82i:43004)
 Dwyer, T. A. W., III See Colombeau, Jean-François; et al., (82m:34011)
 Galeev, R. H. Multidimensional linear passive systems in Hilbert space. (Russian) (82i:93029)
 Hegner, Stephen J. Linear decomposable systems in continuous time. (82i:93049)
 Laubin, P. Wave front set analytique d'une intégrale oscillante. (English summary) (82b:35154)
 Lieutenant, J.-L. Decomposition of analytic functions on \mathbb{R}^n in sum of holomorphic functions in conic tubes. (82i:32005)
 Perrot, B. See Colombeau, Jean-François; et al., (82m:34011)

46Gxx Measures, integration, derivative [For integration on infinite-dimensional spaces, see 28C20; for nonlinear functional analysis, see 58-XX, especially 58Cxx.]

secondary classifications:

- Goguaдзе, D. F. ★О6 интегралах Колмогорова и их некоторых приложениях. (Russian) [Kolmogorov integrals and some of their applications] (82g:28001)

46G05 Derivatives

- Dalec'kii, Ju. L. (with Fomin, S. V.) Differential equations for distributions in infinite-dimensional spaces. (Russian) 82c:46054
 Fomin, S. V. See Dalec'kii, Ju. L., 82c:46054
 Nemeth, A. B. Some differential properties of the convex mappings. 82c:46066

secondary classifications:

- Bittner, Ryszard (with Smentek, Zygfryd) Taylor's formula for many derivatives. Integrals. (82h:47002)
 Colombeau, Jean-François (with Meise, Reinhold) C^∞ -functions on locally convex and on bornological vector spaces. (82c:46037)
 Dem'janov, V. F. (with Rubinov, A. M.) Quasidifferentiable functionals. (Russian) (82c:90112)
 The relation between the Clarke subdifferential and a quasidifferential. (Russian. English summary) (82i:58012)
 Durdil, Jiří On symmetric differentiation. (82c:58016)
 Flett, T. M. ★Differential analysis. (82c:26021)
 Gähler, Werner Generalized Marinescu convergence. (82m:58005)
 Graff, Richard A. A variant of the chain rule for differential calculus. (82h:58017)
 Ioffe, Alexandre D. Nonsmooth analysis: differential calculus of nondifferentiable mappings. (82j:58018)
 Kowalski, Paweł (with Pochcial, Jan) On the directional derivative for the maximum functional. (82m:90138)
 Le Van Hot On the embedding theorem. (82c:46005)
 Levasov, V. A. The structure of subdifferentials of continuous sublinear operators. (Russian) (82c:46020)
 Meise, Reinhold See Colombeau, Jean-François, (82c:46037)
 Michor, P. Manifolds of smooth maps. (82h:58022a)
 Manifolds of smooth maps. II. The Lie group of diffeomorphisms of a noncompact smooth manifold. (82h:58022b)
 Manifolds of smooth maps. III. The principal bundle of embeddings of a noncompact smooth manifold. (82h:58022c)
 Pochcial, Jan See Kowalski, Paweł, (82m:90138)
 Rubinov, A. M. See Dem'janov, V. F., (82c:90112)
 Rudolph, Klaus-Peter Michal-Bastiani differentiability on topological groups. (82i:58016)
 Smentek, Zygfryd See Bittner, Ryszard, (82h:47002)
 Smirnov, E. I. Nonoblateness of a cone in a locally convex space. (Russian) (82c:46009)
 Sokolovskii, V. B. New relations of some problems for equations containing a Lévy-Laplace operator with problems of mathematical physics. (Russian) (82h:35096)
 Suhinin, M. F. An inverse function theorem in locally convex spaces. (Russian) (82a:58008)
 Thibault, Lionel Calcul sous-différentiel et calcul des variations en dimension infinie. (82c:49043)
 Truong Công Nghê (with Yamamoto, S.) Locally convex spaces, differentiation and manifolds. (82c:58017)
 Yamamoto, S. See Truong Công Nghê, (82c:58017)

46G10 Vector-valued measures and integration [See also 28Bxx, 46B22.]

- Becker, Richard Édouard Représentation des mesures coniques. (English summary) 82c:46055
 Bilyeu, Russell G. (with Lewis, Paul W.) Uniform differentiability, uniform absolute continuity and the Vitali-Hahn-Saks theorem. 82g:46083
 Klei, Heinz-Albrecht Représentation intégrale de fonctions disjointement additives. (English summary) 82g:46084
 Lewis, Paul W. See Bilyeu, Russell G., 82g:46083
 Makagon, Andrzej (with Schmidt, Franz) A decomposition theorem for densities of positive operator-valued measure. (Russian summary) 82m:46047
 Okazaki, Yoshiaki Bochner problem on a topological vector space with a quasi-invariant measure. 82c:46059
 Rodriguez-Salinas, Baltasar μ -spaces of Suslin and Lusin. The strong "lifting" property. (Spanish) 82c:46060
 Integration of functions with values in a locally convex space. (Spanish. English summary) 82c:46061
 The Radon-Nikodým theorem for measures with values in a locally convex space. (Spanish. English summary) 82c:46062
 The Radon-Nikodým property, σ -dentability and martingales in locally convex

- spaces. (Spanish. English summary) 82c:46063
 Schmidt, Franz See Makagon, Andrzej, 82m:46047
 Sentilles, Dennis Stonian differentiation and representation of vector functions and measures. 82c:46067
 Stonian integration of vector functions. (See 82g:28002)
 Story, Donald P. A characterization of the local Radon-Nikodým property by tensor products. 82c:46064
 Talagrand, Michel Sur les mesures vectorielles définies par une application Pettis-intégrable. (English summary) 82i:46051

secondary classifications:

- Artstein, Zvi A note on Fatou's lemma in several dimensions. (82h:28006)
 Bombal Gódon, F. On the space $L^p(\mu, X)$. (Spanish. English summary) (82i:46042)
 Brooks, James K. (with Dinculeanu, Nicolae) Weak and strong compactness in the space of Pettis integrable functions. (82g:46072)
 Butković, Davor On integration with respect to measures with values in arbitrary topological vector spaces. (Serbo-Croatian summary) (82c:28009)
 On vector-valued Radon measures. (82h:28012)
 Dinculeanu, Nicolae Uniform σ -additivity and uniform convergence of conditional expectations in the space of Bochner or Pettis integrable functions. (82g:28015)
 See also Brooks, James K., (82g:46072)
 Edgar, Gerald A. Asplund operators and a.e. convergence. (82i:47053)
 Fleischer, Isidore (with Traynor, Tim) Equivalence of group-valued measures on an abstract lattice. (Russian summary) (82m:28021)
 Geitz, Robert F. Pettis integration. (82c:28018)
 Graves, William H. (with Ruess, Wolfgang) Compactness in spaces of vector-valued measures and a natural Mackey topology for spaces of bounded measurable functions. (82j:46037)
 Hudalberdier, V. N. The Lebesgue-Bochner integral and the Féjer-Lebesgue theorem in convergence vector spaces. (Russian) (82m:28018)
 Huff, R. The Radon-Nikodým property. (82h:46034)
 Jiménez Guerra, Pedro A criterion of correspondence between cylindrical measures and Radon measures of type (\mathcal{C}) . (Spanish. English summary) (82c:28014)
 Klavinec, Igor Applications of vector measures. (82m:28019)
 Kondrat'ev, Ju. G. (with Samolonenko, Ju. S.) Generalized derivatives of probability measures on \mathbb{R}^n . (Russian) (82m:28028)
 Lipecki, Zbigniew A generalization of an extension theorem of Bierlein to group-valued measures. (Russian summary) (82m:28022)
 Lugovaja, G. D. (with Šerstnev, A. N.) The Gleason theorem for unbounded measures. (Russian) (82h:28020)
 Oberle, Richard A. Extensions of measures with values in a topological group with applications to vector measures. (82c:28010)
 Pettis, B. J. On the Radon-Nikodým theorem. (82i:28010)
 Rodriguez-Salinas, Baltasar On the Dieudonné-Grothendieck theorem. Necessary and sufficient conditions. (Spanish. English summary) (82c:46002)
 Ruess, Wolfgang See Graves, William H., (82j:46037)
 Saab, Elias (with Saab, Paulette) On the Choquet theory and vector measures. (82g:46026)
 Saab, Paulette See Saab, Elias, (82g:46026)
 Samolonenko, Ju. S. See Kondrat'ev, Ju. G., (82m:28028)
 Saworotnow, Parfeny P. Errata to: "Linear spaces with an H^* -algebra-valued inner product" [Trans. Amer. Math. Soc. 262 (1980), no. 2, 543-549; MR 81m:46080]. (82m:46061)
 Šerstnev, A. N. See Lugovaja, G. D., (82h:28020)
 Šipos, Ján Integration in partially ordered linear spaces. (Russian summary) (82g:28016)
 Smith, William V. Convergence in measure of integrands. (82i:28008)
 Stegall, Charles The Radon-Nikodým property in conjugate Banach spaces. II. (82c:46030)
 Swartz, Charles Integrability for the Dobrakov integral. (82h:28015)
 Weak Fubini theorems for the Dobrakov integral. (82h:28016)
 Taguchi, Yoshiko The Bochner integral for functions with values in the union of ranked vector spaces. (82c:28019)
 Traynor, Tim See Fleischer, Isidore, (82m:28021)
 Uhl, J. J., Jr. Pettis's measurability theorem. (82m:28020)
 Volintiru, Constantin On the Radon-Nikodým property in Banach spaces. (82c:46031)

46G12 Measures and integration on abstract linear spaces [See also 28Cxx.]

- Jajte, Ryszard Gleason measures. 82c:46068
 Romanov, V. A. Limits of differentiable measures in Hilbert space. (Russian) 82c:46061
 Vera Botti, G. Finitely additive measures on topological spaces. (Spanish) 82c:46062

secondary classifications:

- Castaing, Charles Quelques résultats fondamentaux d'analyse convexe et ses applications. (82h:90070)
 Chaurasia, A. R. Weak convergence of measures on separable Banach spaces. (82f:28017)
 Linde, Werner (with Mandrekas, V.; Weron, Aleksander) p -stable measures and p -absolutely summing operators. (82i:47029)
 Mandrekas, V. See Linde, Werner; et al., (82i:47029)
 Muštar, D. H. Spaces in which criteria of the Bochner and Lévy type are satisfied. (Russian) (82c:60011)
 Okazaki, Yoshiaki Bochner's theorem on measurable linear functionals of a Gaussian measure. (82m:28029)
 Weron, Aleksander See Linde, Werner; et al., (82i:47029)
 Zhao, Zhong Xin Quasilinear transformation in abstract Wiener spaces. (82g:60011)

46G15 Lifting theory [See also 28A51.]

- Kaballo, Winfried Lifting-Probleme für \mathcal{C}^∞ -Funktionen. 82m:46048

secondary classifications:

- Babiker, A. G. A. G.** (with Strauß, Werner) Measure spaces in which every lifting is an almost \mathcal{H} -lifting. (Arabic summary) (82c:28009)
- Grat, Siegfried** Measurable weak selections. (82b:28020)
- Kharina, Surjit Singh** Pointwise compactness and weakly compact sets in L^∞ . (82g:46073)
- Rachauskas, A.** A family of stable measures in some Banach spaces. (Russian. Lithuanian and English summaries) (82c:60012)
- Rodriguez-Salinas, Baltasar** Radon measures of type (\mathcal{H}) and measures with "lifting". (Spanish. English summary) (82f:28005)
- μ -spaces of Suslin and Lusin. The strong "lifting" property. (Spanish) (82i:46060)
- Integration of functions with values in a locally convex space. (Spanish. English summary) (82i:46061)
- The Radon-Nikodým property, σ -dentability and martingales in locally convex spaces. (Spanish. English summary) (82i:46063)
- Strauß, Werner** See **Babiker, A. G. A. G.**, (82c:28009)
- Talagrand, Michel** Non-existence de certaines sections mesurables et contre-exemples en théorie du relèvement. (82g:28010)

46G20 Infinite-dimensional holomorphy [See also 32-XX, 58B12, 58C10.]

- Abts, Dietmar** On injective holomorphic Fredholm mappings of index 0 in complex Banach spaces. 82b:46057
- Aurich, Volker** Das meromorphe Levi-Problem in unendlichdimensionalen Banachräumen. 82b:46053
- Barroso, Jorge Alberto** Comparaison de topologies sur des espaces d'applications holomorphes. 82b:46054
- Bayoumi, Aboubakar** Bounding subsets of some metric vector spaces. 82j:46058
- The Levi problem and the radius of convergence of holomorphic functions on metric vector spaces. 82i:46052
- Bianchini, Mauro** $\mathcal{H}(E)$ -bounded subsets of a locally convex space. 82b:46055
- Boland, Philip J.** (with Dineen, Seán) Holomorphy on spaces of distribution. 82i:46065
- Colombeau, Jean-François** (with Perrot, B.) Reflexivity and kernels in infinite-dimensional holomorphy. 82c:46063
- Holomorphy in locally convex spaces and operators on the Fock spaces. 82b:46056
- (with Mujica, Jorge) The Levi problem in nuclear Silva spaces. 82g:46085
- (with Matos, Mário C.) Convolution equations in spaces of infinite-dimensional entire functions. 82b:46058
- (with Mujica, Jorge) Existence of holomorphic mappings with prescribed asymptotic expansions at a given set of points in infinite dimensions. 82m:46049
- (with Matos, Mário C.) On some spaces of entire functions defined on infinite-dimensional spaces. 82i:46068
- Dineen, Seán** Holomorphic germs on compact subsets of locally convex spaces. 82i:46053
- Topological properties inherited by certain subspaces of holomorphic functions. 82m:46050
- See also **Boland, Philip J.**, 82i:46065
- Fujimoto, Yoshihisa** Analytic functionals on a countably infinite-dimensional topological vector space. 82b:46059
- Hackevič, V. A.** (with Šoihet, D. M.) On a generalization of Montel's theorem for the case of analytic mappings in Banach spaces. (Russian) 82i:46069
- Isidro, J. M.** On some topological algebras of holomorphic functions. 82j:46059
- On τ_ρ -completeness of $\mathcal{H}(U)$. 82c:46070
- On the distinguished character of the function spaces of holomorphic mappings of bounded type. 82c:46056
- Matos, Mário C.** See **Colombeau, Jean-François**, 82b:46058 and 82i:46068
- Moraes, Luiz A.** Envelopes for types of holomorphy. 82i:46054
- Holomorphic functions on strict inductive limits. 82m:46051
- Mujica, Jorge** Domains of holomorphy in (DFC)-spaces. 82i:46055
- See also **Colombeau, Jean-François**, 82g:46085 and 82m:46049
- Nachbin, Leopoldo** Analogies entre l'holomorphie et la linéarité. 82c:46064
- Why holomorphy in infinite dimensions? 82i:46066
- Perrot, B.** See **Colombeau, Jean-François**, 82c:46063
- Šoihet, D. M.** Some analytic isomorphisms in a strictly convex Banach space and Cartan's theorem. (Russian) 82g:46086
- See also **Hackevič, V. A.**, 82i:46069
- Sparing, H.-D.** Analytische Operatoren vektorieller Veränderlicher in reellen und komplexen Banachräumen. II. 82c:46057a
- Analytische Operatoren vektorieller Veränderlicher in reellen und komplexen Banachräumen. III. 82c:46057b
- Valdivia, Manuel** Interpolation in certain function spaces. 82i:46067
- Zaine, Maria Carmelina F.** Envelopes of Silva-holomorphy. 82i:46056

secondary classifications:

- Ansemil, J. M.** (with Ponte, S.) An example of a quasinormable Fréchet function space which is not a Schwartz space. (82i:46004)
- (with Colombeau, Jean-François) The Paley-Wiener-Schwartz isomorphism in nuclear spaces. (82g:46082)
- Cherfaoui, Najib** Rayon de bornologie des fonctions plurisousharmoniques sur les espaces de Banach. (English summary) (82c:31008)
- Colombeau, Jean-François** (with Perrot, B.) The $\bar{\partial}$ equation in DFN spaces. (82c:32019)
- (with Gay, Roger; Perrot, B.) Division by holomorphic functions and convolution equations in infinite dimension. (82c:46060)
- See also **Ansemil, J. M.**, (82g:46082)
- Crăciun, Silviu** Applications quasi-conformes sur des produits finis d'espaces normés. [Quasiconformal mappings on finite products of normed spaces] (82m:30026)
- Drużkowski, Ludwik M.** A theorem on convex tube domains in infinite-dimensional

topological vector spaces. (Russian summary) (82f:32028)

- Franzoni, Tullio** (with Vesentini, Edoardo) ★Holomorphic maps and invariant distances. (82a:32032)
- Gay, Roger** See **Colombeau, Jean-François**; et al., (82c:46060)
- Kondrat'ev, Ju. G.** Nuclear spaces of entire functions in problems of infinite-dimensional analysis. (Russian) (82c:46052)
- Kramm, Bruno** (\mathcal{H}) -analytic spaces, Stein algebras and a "universal" holomorphic functional calculus. (82c:32024)
- Perrot, B.** See **Colombeau, Jean-François**, (82c:32019) and (82c:46060)
- Ponte, S.** See **Ansemil, J. M.**, (82i:46004)
- Vesentini, Edoardo** See **Franzoni, Tullio**, (82a:32032)

46G99 None of the above, but in this section

- Bertuzzi, Alessandro** (with Gandolfi, Alberto; Germani, Alfredo) A Weierstrass-like theorem for real separable Hilbert spaces. 82b:46071
- Boland, Philip J.** Polynomials and multilinear forms on fully nuclear spaces. 82b:46060
- Egorov, A. D.** The Fourier-Wiener transformation and Wick ordering. (Russian. English summary) 82b:46061
- Gandolfi, Alberto** See **Bertuzzi, Alessandro**; et al., 82b:46071
- Germani, Alfredo** See **Bertuzzi, Alessandro**; et al., 82b:46071
- Kozek, Andrzej** Convex integral functionals on Orlicz spaces. 82c:46058
- Krée, Paul** Espaces collectivement localement convexes. 82b:46062a
- Formes et coformes sur un espace nucléaire complet. 82b:46062b
- Triplets nucléaires des champs. 82b:46062c
- Méthode fonctionnelle en théorie des champs. 82b:46062d
- Llavona, José G.** Approximations of differentiable functions. 82c:46057
- Mišić, Ladislav** Additivity of the gauge. (Russian summary) 82c:46072
- Nakagami, Keiko** Integration and differentiation of δ -function. I. 82i:46068
- Packet, Philippe** Espaces de Dirichlet et capacités fonctionnelles sur des triplets de Hilbert Schmidt. 82b:46073
- Petzsche, H.-J.** Some results of Mittag-Leffler-type for vector valued functions and spaces of class \mathcal{E} . 82c:46043
- Phan Văn Chu'ong** Densité des sections extrémales d'une multiapplication mesurable. 82c:46059

secondary classifications:

- Berezans'kii, Ju. M.** Representation of positive definite kernels by continual integrals. (Russian) (82a:47033)
- Borwein, J. M.** A strong duality theorem for the minimum of a family of convex programs. (82f:90077)
- See also **Tijs, S. H.**, (82a:90086)
- Cobzas, Stefan** On the Lipschitz properties of continuous convex functions. (82b:26020)
- Degani Cattalani, F.** The spectrum of simple and ordinate nonconvexity for the Ljapunov set in infinite dimension. (Italian) (82b:26014)
- Duffin, Richard J.** (with Jeroslow, Robert) Lagrangean functions and affine minorants. (82c:90074)
- Fierro Bello, Carmen** Some questions on the space $L^1(\lambda, I)$. (Spanish. English summary) (82c:46053)
- Heath, L. F.** (with Suffridge, T. J.) Starlike, convex, close-to-convex, spiral-like, and Φ -like maps in a commutative Banach algebra with identity. (82m:46056)
- Hiriart-Urruty, J.-B.** Lipschitz r -continuity of the approximate subdifferential of a convex function. (82c:58007)
- Jeroslow, Robert** See **Duffin, Richard J.**, (82c:90074)
- Kalton, N. J.** The Orlicz-Pettis theorem. (82g:46027)
- Masani, P.** Multiplicative partial integration and the Trotter product formula. (82m:47030a)
- Erratum: "Multiplicative partial integration and the Trotter product formula". (82m:47030b)
- Medeiros, L. A.** Initiations to elliptic variational inequalities. (Portuguese) (82f:35084)
- Mitoma, Itaru** On the norm continuity of S' -valued Gaussian processes. (82b:60070)
- Mustăța, Costică** The extension of starshaped bounded Lipschitz functions. (82g:46052)
- Noor, M. Aslam** A constructive proof of the Lax-Milgram lemma. (82c:47023)
- Pian, J.** (with Sharma, C. S.) The variational principle for the scattering phase. (82c:58017)
- Saab, Paulette** A general Rudin-Carleson theorem for vector-valued functions. (82g:46074)
- Sharma, C. S.** See **Pian, J.**, (82c:58017)
- Suffridge, T. J.** See **Heath, L. F.**, (82m:46056)
- Sultanbekov, F. F.** Random functionals on the space of strongly measurable functions. (Russian) (82i:60007)
- Théra, Michel** Subdifferential calculus for convex operators. (82f:90100)
- Thron, R.** Nichtlineare Vektroptimierungsprobleme und eine Modifizierung des Satzes von Krein-Mil'man. (82a:90161)
- Tijs, S. H.** (with Borwein, J. M.) Some generalizations of Carathéodory's theorem via barycentres, with application to mathematical programming. (82a:90086)
- Uglanov, A. V.** Second-order parabolic differential equations for generalized measures on Hilbert space. (Russian. English summary) (82a:35095)
- Surface integrals and differential equations on an infinite-dimensional space. (Russian) (82c:58026)
- Surface integrals in a Banach space. (Russian) (82c:58025)
- Welland, Robert** Grassmann spaces in Hilbert space. (82d:58008)
- Zălinescu, Constantin** A generalization of the Farkas lemma and applications to convex programming. (82f:90082)
- Zaslavskii, A. Ja.** Sublinear operators and semigroups. (Russian) (82i:47057)

46Hxx Topological algebras, normed rings and algebras, Banach algebras {For group algebras, convolution algebras and measure algebras, see 43-XX.}

46H05 General theory

- Alexiewicz, Andrzej (with Kąkol, Jerzy) Gearing algebras. **82i:46069**
- Al-Mosajil, Abdullah H. Finite dimensionality of a semiprime normed algebra which is equal to its socle. **82b:46058**
- Aupetit, Bernard Une généralisation du théorème de Gleason-Kahane-Zelazko pour les algèbres de Banach. (English summary) **82a:46044**
- (with Gardner, L. Terrell) On a theorem of S. Berberian and I. Halperin. **82i:46070**
- Badé, W. G. (with Curtis, P. C., Jr.; Laursen, K. B.) Divisible subspaces and problems of automatic continuity. **82b:46059**
- Curtis, P. C., Jr. See Badé, W. G.; et al., **82b:46059**
- Demirbaş, Mustafa Left and right spectra. (Turkish summary) **82f:46057**
- Gardner, L. Terrell See Aupetit, Bernard, **82i:46070**
- Gorin, E. A. Some properties of the group of invertible elements of a Banach algebra. (Russian) **82b:46063**
- Grosser, Michael (with Losert, Viktor; Rindler, Harald) "Double multipliers" and asymptotically invariant approximating elements. **82d:46069**
- Husain, Tagdir (with Watson, Saleem) Topological algebras with orthogonal Schauder bases. **82i:46064**
- Kąkol, Jerzy See Alexiewicz, Andrzej, **82i:46069**
- Kowalski, S. (with Słodkowski, Z.) A characterization of multiplicative linear functionals in Banach algebras. **82d:46070**
- Laursen, K. B. See Badé, W. G.; et al., **82b:46059**
- Losert, Viktor See Grosser, Michael; et al., **82d:46069**
- Oshobi, E. O. (with Pym, J. S.) Banach algebras whose duals are multiplier algebras. **82i:46071**
- Petrov, Kalin P. Bornology of polynormed algebras. (Russian) **82i:46074**
- Phadke, S. V. (with Thakare, N. K.) A study of elements of normed algebras by means of special subsets. **82j:46060**
- Pym, J. S. See Oshobi, E. O., **82i:46071**
- Rindler, Harald See Grosser, Michael; et al., **82d:46069**
- Słodkowski, Z. See Kowalski, S., **82d:46070**
- Smith, R. R. The numerical range in the second dual of a Banach algebra. **82e:46065**
- Štěrbová, Dina Square roots and quasi-square roots in locally multiplicatively convex algebras. (Czech and Russian summaries) **82i:46072**
- Thakare, N. K. See Phadke, S. V., **82j:46060**
- Verdera, Joan Finitely generated, projective extensions of an m -convex algebra. (Spanish) **82i:46073**
- Watson, Saleem See Husain, Tagdir, **82b:46064**
- Young, N. J. Norm and spectral radius for algebraic elements of a Banach algebra. **82d:46071**

secondary classifications:

- Beckenstein, Edward (with Narici, Lawrence) Extending non-Archimedean norms on algebras. **(82m:46077)**
- Jusubor, I. M. Joint numerical domain of elements of a Banach algebra. (Russian) **(82d:47006)**
- Kugler, Werner On the symmetry of generalized L^1 -algebras. **(82f:46074)**
- Narici, Lawrence See Beckenstein, Edward, **(82m:46077)**
- Vasilevskii, N. L. On the theory of symbols for Banach algebras of operators that generalize algebras of singular integral operators. (Russian) **(82m:47024)**

46H10 Ideals and subalgebras

- Chuan, Jen Chung Axioms for closed left ideals in a C^* -algebra. **82d:46072**

46H15 Representations

- Feldman, W. A. (with Porter, J. F.) The order topology for function lattices and realcompactness. **82b:46065**
- Krupnik, N. Ja. A sufficient set of n -dimensional representations of a Banach algebra and of n -symbols. (Russian) **82c:46060**
- Litvinov, G. L. (with Lomonosov, V. L.) Density theorems in locally convex spaces and irreducible representations. (Russian) **82g:46087**
- Lomonosov, V. L. See Litvinov, G. L., **82g:46087**
- Porter, J. F. See Feldman, W. A., **82b:46065**
- Vrbová, P. A remark concerning commutativity modulo radical in Banach algebras. **82g:46088**

secondary classifications:

- Araohovitis, John Topological algebra representations of topological groups. **(82a:22003)**
- van der Put, Marius La conjecture de la couronne en analyse complexe et p -adique. **(82i:32042)**

46H20 Structure, classification

- Heinze, Joachim A remark on a paper of V. K. Srinivasan: "On some Gel'fand-Mazur like theorems in Banach algebras" [Bull. Austral. Math. Soc. **20** (1979), no. 2, 211-215; MR **81c:46029a**]. **82a:46045**
- Murphy, Gerard J. Continuity of the spectrum and spectral radius. **82b:46066**
- Roitman, M. (with Sternfeld, Y.) When is a linear functional multiplicative? **82j:46061**
- (Shaig, H.) See Srinivasan, V. K., **82b:46067**
- Smyth, M. R. F. On problems of Olubummo and Alexander. **82a:46046**

- Srinivasan, V. K. Corrigenda: "On some Gel'fand-Mazur-like theorems in Banach algebras" [Bull. Austral. Math. Soc. **20** (1979), no. 2, 211-215; MR **81c:46029a**]; "On some Gel'fand-Mazur-like theorems in p -normed algebras" [ibid. **21** (1980), no. 2, 211-221; MR **81f:46058**] with H. Shaig. **82b:46067**
- See also Heinze, Joachim, **82a:46045**
- Sternfeld, Y. See Roitman, M., **82j:46061**
- Talabani, M. M. Semiradial Banach algebras. (Arabic summary) **82i:46075**
- Verschoren, A. Finite-dimensional π -regular algebras. **82i:46074**

secondary classifications:

- Al-Mosajil, Abdullah H. Finite dimensionality of a semiprime normed algebra which is equal to its socle. **(82b:46058)**
- Ho, Ch'ing Jen Approximate identities in normed algebras. **(82g:43005a)**
- Characterizations of Segal algebras. **(82g:43005b)**
- Approximate identities in $D_H S(G)$. **(82g:43005c)**

46H25 Normed modules and Banach modules, topological modules (if not placed in 13-XX or 16-XX)

- Grosser, Michael ★Bidualräume und Vervollständigungen von Banachmodulen. (German) [Bidual spaces and completions of Banach modules] **82i:46075**
- Laursen, K. B. Automatic continuity of generalized intertwining operators. **82i:46076**

secondary classifications:

- Behrends, Ehrhard M -structure in tensor products of Banach spaces. **(82g:46034)**
- Grosser, Michael $L^1(G)$ as an ideal in its second dual space. **(82i:43005)**

46H30 Functional calculus [See also 47A60.]

- Eguether, G. (with Ferrier, J.-P.) Problèmes de théorie spectrale en une infinité de variables. **82e:46066**
- Fainstein, A. S. See Isaev, G. A., **82b:46076**
- Ferrier, J.-P. See Eguether, G., **82e:46066**
- Gelbaum, Bernard R. The Cayley-Hamilton theorem in Banach algebras. **82e:46067**
- Isaev, G. A. (with Fainstein, A. S.) Joint spectra of finite commutative families. (Russian) **82b:46076**
- Mocanu, Gh. Fonctionnelles relativement multiplicatives et le spectre. **82i:46077**
- Nishizawa, Kiyoko À propos de l'unicité du calcul fonctionnel holomorphe des b -algèbres. **82e:46068**

secondary classifications:

- Harte, R. E. Invertibility, singularity and Joseph L. Taylor. **(82m:47003)**
- Luong, N. C. (with Szász, Árpád) Remarks on a functional calculus based on Fourier series. **(82a:43004)**
- Putinar, Mihai Functional calculus with sections of an analytic space. **(82i:32033)**
- Salvi, Rodolfo On a functional calculus in a commutative algebra. (Italian) **(82m:32003)**
- Szász, Árpád Discrete Fourier analysis for quotient multipliers. **(82a:43005)**
- See also Luong, N. C., **(82a:43004)**

46H99 None of the above, but in this section

- Ajupov, Š. A. A theorem of ergodic type in Jordan algebras. (Russian) **82e:46069**
- Fong, Che Kao (with Lam, Louisa) On spectral theory and convexity. **82c:46061**
- Lam, Louisa See Fong, Che Kao, **82c:46061**
- Matveičuk, M. S. The law of multiplication of random norms. (Russian) **82g:46089**
- Schnabl, Roman Die Algebra der Bernsteinoperatoren und symmetrische Funktionen. **82b:46060**
- Wu, Cong Xin Perfect matrix algebras. I. The problems of multiplicative continuity. (Chinese. English summary) **82c:46062**

secondary classifications:

- Ajupov, Š. A. On the theory of partially ordered Jordan algebras. (Russian) **(82e:17019a)**
- A spectral theorem for OJ-algebras. (Russian) **(82e:17019b)**
- Amuririşei, Gh. Sequences and series in topological algebras. (Romanian. French summary) **(82k:40004)**
- Ballico, Edoardo (with Ferreira, Arturo V.) A structural property of prime ideals in a topological Noetherian algebra with an application to complex analysis. (Italian summary) **(82c:32015)**
- Bojadžiev, H. N. (with Youngson, M. A.) Alternators on Banach Jordan algebras. **(82m:17009)**
- Ėšdarlatov, Ė. A generalized operator equation in a Banach algebra. (Russian) **(82i:47017)**
- Ferreira, Arturo V. See Ballico, Edoardo, **(82c:32015)**
- el-Mallah, Mohamed Lamei (with Micali, Artibano) Sur les dimensions des algèbres absolument valuées. (English summary) **(82e:17001)**
- Micali, Artibano See el-Mallah, Mohamed Lamei, **(82e:17001)**
- Mosolova, M. V. Functions of noncommutative operators generating a graded Lie algebra. (Russian) **(82i:17013)**
- Mustafaev, L. G. Semigroups of linear continuous transformations. I, II. (Russian) **(82c:47046)**
- Sadikov, N. M. On a method of Z. I. Halilov. (Russian. Azerbaijani and English summaries) **(82c:47045)**
- Saworotnow, Parfeny P. Errata to: "Linear spaces with an H^* -algebra-valued inner product" [Trans. Amer. Math. Soc. **262** (1980), no. 2, 543-549; MR **81m:46080**]. **(82m:46061)**
- Tatev, Z. A singular operator equation with Carleman shift of order two in normed rings. (Russian) **(82f:47019)**
- Youngson, M. A. See Bojadžiev, H. N., **(82m:17009)**

46JXX Commutative Banach algebras and commutative topological algebras

Gorin, E. A. G. E. Šilov's investigations in the theory of commutative Banach algebras and their subsequent development. (Russian) **82a:46047**
(Šilov, G. E.) See Gorin, E. A., **82a:46047**

46J05 General theory

Esterle, Jean Irregularity of the rate of decrease of sequences of powers in the Volterra algebra. **82f:46058**
Rates of decrease of sequences of powers in commutative radical Banach algebras. **82h:46068**
Fujii, Kazuyuki A representation of real K -groups by means of a Banach algebra. **82h:46061**
Kamowitz, Herbert Compact endomorphisms of Banach algebras. **82c:46063**
Kramm, Bruno Komplexe Funktionen-Algebren. **82h:46062**
Murphy, Gerard J. The cortex and the approximate zero divisors of an algebra. **82a:46048**
Sánchez-Fernández, Carlos Algebraization of transcendental equations with simple spectrum. (Spanish) **82k:46077**
Thomas, Marc P. Lower bounds for commutative radical Banach algebras. **82c:46070**

secondary classifications:

Beckenstein, Edward (with Narici, Lawrence) Extending non-Archimedean norms on algebras. **82m:46077**
Fainstein, A. S. See Isaev, G. A., (**82c:46076**)
Isaev, G. A. (with Fainstein, A. S.) Joint spectra of finite commutative families. (Russian) (**82c:46076**)
Narici, Lawrence See Beckenstein, Edward, (**82m:46077**)
Salvi, Rodolfo On a functional calculus in a commutative algebra. (Italian) (**82m:32003**)

46J10 Banach algebras of continuous functions, function algebras

Batty, C. J. K. Derivations on compact spaces. **82k:46078**
Bear, H. S. (with Hile, G. N.) Analytic structure in function algebras. **82c:46064**
Bruna, Joaquim An algebra of quasianalytic functions. (Spanish. English summary) **82d:46073**
Choy, Stephen T. L. On Riesz representation theorem. **82h:46063**
Cole, Brian J. (with Glicksberg, Irving) Jensen measures and a theorem of Radó. **82a:46049**
Dales, H. G. (with McClure, J. P.) Higher point derivations on commutative Banach algebras. III. **82j:46062**
Ellis, A. J. Some approximation results for function spaces. **82a:46050**
Esterle, Jean Universal properties of some commutative radical Banach algebras. **82c:46078**
Glicksberg, Irving See Cole, Brian J., **82a:46049**
Globevnik, Josip Extensions and selections in subspaces of $C(K)$. **82c:46065**
Goodman, Frederick M. Non-quasi-well behaved closed \ast -derivations. **82h:46064**
Hatori, Osamu Functions which operate on the real part of a function algebra. **82j:46063**
Hile, G. N. See Bear, H. S., **82c:46064**
Izuchi, Keiji (with Izuchi, Yuko) Flows and function algebras of generalized analytic functions. **82k:46079**
Izuchi, Yuko See Izuchi, Keiji, **82k:46079**
Jafarian, A. A. See Zemánek, Jaroslav, **82c:46068**
Jimbo, Toshiya Proper Dirichlet subalgebras of big disk algebras. **82c:46066**
Karahanjan, M. I. Some algebraic characterizations of the algebra of all continuous functions on a locally connected compactum. (Russian) **82h:46065**
Kosiek, Marek A property of measures orthogonal to a tensor product of function algebras. (Russian summary) **82j:46064a**
Decomposition and spectral properties of operator representations of the algebra $R(K_1 \times K_2)$. (Russian summary) **82j:46064b**
Lebesgue-type decompositions of a pair of commuting Hilbert space operators. (Russian summary) **82j:46064c**
Kramm, Bruno Analytische Struktur in Spektren—ein Zugang über die ∞ -dimensionale Holomorphie. (English summary) **82a:46051**
Kulkarni, S. H. (with Limaye, B. V.) Gleason parts of real function algebras. **82m:46052**
Kurose, Hideki An example of a non-quasi-well-behaved derivation in $C(I)$. **82k:46080**
Limaye, B. V. See Kulkarni, S. H., **82m:46052**
Martínez Carracedo, Celso See Sanz Alix, Miguel A., **82h:46069**
McClure, J. P. See Dales, H. G., **82j:46062**
Ohno, Shūichi Weak \ast maximality of certain Hardy algebras $H^\infty(m)$. **82c:46067**
(with Wada, Junzo) Compact homomorphisms on function algebras. **82h:46079**
Rickart, C. E. Some function algebras with common spectrum. **82j:46065**
Rudin, Walter Unitarily invariant algebras of continuous functions of spheres. **82i:46080**
Sanz Alix, Miguel A. (with Martínez Carracedo, Celso) Relations between certain uniformities and the algebraic structure of a ring. (Spanish) **82h:46069**
About certain subrings of $\mathcal{C}(X)$. (Spanish) **82h:46070**
Sawoń, Zbigniew (with Warzecha-Sawoń, Aleksandra) Maximal subalgebras of algebra $C(X)$. (Russian summary) **82j:46090**
Arens-Singer measures in uniform Banach algebras. (Russian summary) **82j:46091**
Sidney, S. J. Quotients of $C(X)$ by uniform algebras. **82d:46074**
Tanaka, Jun-ichi On a theorem of P. S. Muhly. **82g:46092**
Trent, Tavan T. A Müntz-Szász theorem for $C(\bar{D})$. **82h:46071**
Wada, Junzo See Ohno, Shūichi, **82h:46079**
Warzecha-Sawoń, Aleksandra See Sawoń, Zbigniew, **82j:46090**
Wermer, John Maximum modulus algebras and singularity sets. **82c:46071**
Younis, Rahman M. Extension results in the Hardy space associated with a logmodular algebra. **82a:46052**

Zemánek, Jaroslav A simple proof of the Stone-Weierstrass theorem. (Persian) **82c:46068**
secondary classifications:

Benkő, Iosif Continuous families of subspaces. (Romanian. English summary) (**82f:54014**)
Blair, Robert L. Extensions of Lebesgue sets and of real-valued functions. (**82c:54011**)
Blasco, José Luis Two questions on Wallman rings. (**82c:54017**)
Corach, Gustavo (with Laroitonda, Angel Rafael) Differentiable compactifications. (Spanish) (**82f:58017**)
(with Laroitonda, Angel Rafael) Algebras of differentiable functions. (Spanish) (**82j:32019**)
Hager, Anthony W. Isomorphisms of some completions of $C(X)$. (**82g:54026**)
Kamowitz, Herbert Compact endomorphisms of Banach algebras. (**82c:46063**)
Compact weighted endomorphisms of $C(X)$. (**82m:47020**)
Laroitonda, Angel Rafael See Corach, Gustavo, (**82f:58017**) and (**82j:32019**)
Loser, Viktor A characterization of the minimal strongly character invariant Segal algebra. (**82i:43004**)
Martignon, Laura Banach f -algebras and Banach lattice algebras with unit. (**82c:46027**)
Mehta, R. D. (with Vasavada, M. H.) Tensor product of URM algebras. (**82f:46075**)
Prola, João B. On the spectra of non-Archimedean function algebras. (**82c:32043**)
Varopoulos, Nicholas Th. The Helson-Szegő theorem and A_p -functions for Brownian motion and several variables. (**82a:60069**)
Vasavada, M. H. See Mehta, R. D., (**82f:46075**)
Večtomov, E. M. The module of all functions over a ring of continuous functions. (Russian) (**82h:16041**)
Woodruff, David S. Complete function algebras with values in a uniform field. (**82c:46084**)

46J15 Banach algebras of differentiable or analytic functions, H^p -spaces [See also 30H05, 32A35, 32E25, 42B30.]

Brooks, R. M. Analytic structure in the spectra of certain uF-algebras. **82m:46053**
Burgues i Badia, Josep M. Algebras of type $H^\infty + L^\infty$. (Catalan) **82a:46053**
Chaumat, Jacques Quelques propriétés du préduel de H^∞ . **82c:46072**
Quelques propriétés du couple d'espaces vectoriels $(L^\infty/H^\infty, H^\infty)$. (English summary) **82i:46081**
Deeb, Waleed M. Decomposition of measures orthogonal to $H^\infty(D)$. (Arabic summary) **82d:46075**
Gerber, Eric Alan (with Weiss, Max L.) Parts in H^∞ with homeomorphic analytic maps. **82c:46081**
Glicksberg, Irving An application of Werner's subharmonicity theorem. **82m:46054**
Globevnik, Josip Fourier coefficients of the Rudin-Carleson extensions. **82d:46076**
Goldmann, Helmut Nukleare Mengen im C^\ast . **82h:46072**
Grigorjan, S. A. Algebras generated by functions that are analytic in the Arens-Singer sense. (Russian. Armenian summary) **82m:46055**
Guillory, Carroll (with Sarason, Donald) Division in $H^\infty + C$. **82j:46066**
Heath, L. F. (with Suffridge, T. J.) Starlike, convex, close-to-convex, spiral-like, and Φ -like maps in a commutative Banach algebra with identity. **82m:46056**
Madgerova, A. S. Isomorphisms of certain algebras of functions on an n -dimensional torus. (Russian) **82i:46082**
McDonald, John N. Closed orbits of convex sets of operators on the disk algebra. **82m:46057**
Nakazi, Takahiko Quasimaximal ideals and quasiprimary ideals of weak \ast -Dirichlet algebras. **82a:46054**
Extended weak \ast -Dirichlet algebras. **82a:46055**
von Renteln, Michael Zur Idealstruktur der Algebren F^\ast und H^∞ . **82a:46056**
A simple constructive proof of an analogue of the corona theorem. **82h:46073**
Roan, Raymond C. Weak \ast generators for a class of subalgebras of l^1 . **82a:46057**
Sarason, Donald See Guillory, Carroll, **82j:46066**
Suffridge, T. J. See Heath, L. F., **82m:46056**
Sundberg, Carl A note on algebras between L^∞ and H^∞ . **82g:46093**
Tolokonnikov, V. A. Estimates in Carleson's corona theorem and finitely generated ideals of the algebra H^∞ . (Russian) **82a:46058**
Weiss, Max L. See Gerber, Eric Alan, **82c:46081**
Wojtaszczyk, P. On projections in spaces of bounded analytic functions with applications. **82a:46059**
Wolniewicz, Tomasz M. On the Banach-Mazur distance between annulus algebras. (Russian summary) **82h:46074**
Young, N. J. A maximum principle for interpolation in H^∞ . **82i:46083**

secondary classifications:

Amar, Éric Extension de fonctions analytiques avec estimation. (**82j:32014**)
(with Charpentier, Philippe) Extensions dans les classes de Hardy de fonctions holomorphes définies sur une sous-variété du bidisque. (English summary) (**82g:32009**)
Interpolation dans le polydisque de C^\ast . (**82h:32017**)
Non cohérence de certains anneaux de fonctions holomorphes. (**82h:32016**)
Anderson, James Milne (with Rochberg, R. H.) Toeplitz operators associated with subalgebras of the disk algebra. (**82j:47041**)
Anderson, Stephen L. Green's function, Jensen measures, and bounded point evaluations. (**82k:30055**)
Bartenwerfer, Wolfgang Die Lösung des nichtarchimedischen Corona-Problems für beliebige Dimension. (**82c:32016**)
Becker, Joseph A. (with Zame, William R.) Homomorphisms into analytic rings. (**82k:32042**)
(with Zame, William R.) Applications of functional analysis to the solution of power series equations. (**82k:32029**)
Bedford, Eric (with Fornæss, John Erik) Approximation on pseudoconvex domains. (**82h:32019**)

- Berkson, Earl** One-parameter semigroups of isometries into H^p . (82e:47051)
- Bourgain, Jean** Sur les projections dans H^∞ et la propriété de Grothendieck. (English summary) [Projections in H^∞ and the Grothendieck property] (82i:47024)
- Caljuk, I. M.** Some extremal problems for Hardy classes of vector-valued functions. (Russian) (82f:46026)
- Charpentier, Philippe** See Amar, Éric, (82g:32009)
- Chaumat, Jacques** (with Chollet, Anne-Marie) Caractérisation et propriétés des ensembles localement pics de $A^\infty(D)$. (82i:32045)
- Chollet, Anne-Marie** See Chaumat, Jacques, (82i:32045)
- Chui, Charles K.** (with Smith, Philip W.; Ward, Joseph D.) Approximation by M -ideals in the disc algebra. (82f:30032)
- Cima, Joseph A.** (with Wogen, W. R.) On isometries of the Bloch space. (82m:30052)
- Cohn, William S.** Orthogonal complements to invariant subspaces. (82a:47033)
- Coifman, R. R.** (with Rochberg, R. H.; Taibleson, Mitchell H.; Weiss, Guido) Introduction. (82g:32010)
- Džakov, P. B.** (with Mitjagin, B. S.) The structure of polynomial ideals in the algebra of entire functions. (82a:32006)
- Džanašija, G. A.** (with Oziasvili, T. S.) The uniqueness of the orthogonal decomposition of function rings on a circle. (Russian) (82a:30059)
- Fornæss, John Erik** See Bedford, Eric, (82b:32019)
- Gamelin, T. W.** Wolff's proof of the corona theorem. (82a:30042)
- García-Cuerva, José** Weighted H^p spaces. (82a:42018)
- Gorin, E. A.** See Vinogradov, S. A.; et al., (82k:46039)
- Helton, J. William** The distance of a function to H^∞ in the Poincaré metric; electrical power transfer. (82f:32035)
- Hruščev, S. V.** See Vinogradov, S. A.; et al., (82k:46039)
- Isidro, J. M.** On some topological algebras of holomorphic functions. (82j:46059)
- Jakóbczak, Piotr** Approximation and decomposition theorems for the algebras of analytic functions in strictly pseudoconvex domains. (82k:32044)
- Janas, Jan** Toeplitz operators for hypo-Dirichlet algebras. (82a:47027)
- Jevtić, M.** Spaces defined by the operators L_p^* and J_p^* . (Serbo-Croatian. English summary) (82f:30042)
- Jones, Peter W.** Estimates for the corona problem. (82i:30051)
- Kotočigov, A. M.** See Vinogradov, S. A., (82k:46040)
- Krasičkov-Ternovskii, I. F.** Spectral synthesis on systems of convex domains. Extension of the synthesis. (Russian) (82d:46058)
- Kronstadt, Eric P.** (with Neville, Charles W.) Interpolation by vector-valued functions of class H^p and absolutely convergent sequences of interpolating functions. (Italian summary) (82b:32022)
- Lee, Hsuan Pei** (with Wermer, John) Orthogonal measures for subsets of the boundary of the ball in C^2 . (82k:32024)
- Mitchell, Josephine** Lipschitz spaces of holomorphic and pluriharmonic functions on bounded symmetric domains in C^N ($N > 1$). (82i:32061)
- Mitjagin, B. S.** See Džakov, P. B., (82a:32006)
- Muhly, Paul S.** Isometries of ergodic Hardy spaces. (82d:28018)
- Neville, Charles W.** See Kronstadt, Eric P., (82b:32022)
- Olin, Robert F.** (with Thomson, James E.) Irreducible operators whose spectra are spectral sets. (82j:47012)
- Oziasvili, T. S.** See Džanašija, G. A., (82a:30059)
- Peller, V. V.** Hankel operators of class \mathcal{B}_p and their applications (rational approximation, Gaussian processes, the problem of majorization of operators). (Russian) (82g:47022)
- Rochberg, R. H.** See Coifman, R. R.; et al., (82g:32010) and Anderson, James Milne, (82j:47041)
- Saito, Kichi-Suke** Shift-invariant Hardy spaces and their applications. (Japanese) (82m:46072)
- Šamojan, F. A.** Division theorems and closed ideals in algebras of analytic functions with a majorant of finite growth. (Russian. Armenian and English summaries) (82e:30073)
- Smith, Philip W.** See Chui, Charles K.; et al., (82f:30032)
- Stanton, Charles M.** On the closed ideals in $A(W)$. (82g:30079)
- Stray, Arne** Vitushkin's method and some problems in approximation theory. (82g:30070)
- Taibleson, Mitchell H.** See Coifman, R. R.; et al., (82g:32010)
- Taylor, Richard** A generalization of Hartogs' theorem relating to the subalgebras of continuous functions on the n -dimensional torus. (82m:32014)
- Thomson, James E.** See Olin, Robert F., (82j:47012)
- Verbitskii, I. É.** Inner functions as multipliers of L_p^2 spaces. (Russian) (82j:30045)
- Vinogradov, S. A.** (with Gorin, E. A.; Hruščev, S. V.) Free interpolation in H^∞ in the sense of P. Jones. (Russian. English summary) (82k:46039)
- (with Kotočigov, A. M.) Some remarks on interpolation by analytic functions that belong to Besov spaces B_p^0 . (Russian. English summary) (82k:46040)
- Ward, Joseph D.** See Chui, Charles K.; et al., (82f:30032)
- Weiss, Guido** See Coifman, R. R.; et al., (82g:32010)
- Wermer, John** See Lee, Hsuan Pei, (82k:32024)
- Wheeden, Richard L.** On the dual of weighted $H^1(|z| < 1)$. (82a:46030)
- Wogen, W. R.** See Cima, Joseph A., (82m:30052)
- Younis, Rahman M.** Extension results in the Hardy space associated with a logmodular algebra. (82a:46052)
- Zame, William R.** See Becker, Joseph A., (82k:32029) and (82k:32042)
- Zarantonello, Sergio E.** The sheaf of H^p -functions in product domains. (82k:32026)
- Representation theorems for Hardy spaces** See Coifman, R. R.; et al., (82g:32010)
- 46J20 Ideals, maximal ideals, boundaries**
- Badé, W. G.** (with Dales, H. G.) Norms and ideals in radical convolution algebras. (82k:46082)
- Bhatt, S. J.** On Arens' algebra L^∞ . (Serbo-Croatian summary) (82g:46094)
- Blatter, Jörg** The Gel'fand space of the Banach algebra of Riemann integrable functions. (82c:46069)
- Borovskii, Ju. V.** On closed ideals in an algebra of entire functions. (Russian) (82i:46084)
- Dales, H. G.** See Badé, W. G., (82k:46082)
- Pugač, L. I.** Flat ideals of Banach algebras. (Russian. English summary) (82c:46073)
- Spižnev, M. S.** Banach algebras of functions that have identical asymptotic behavior at infinity. (Russian) (82m:46058)
- Żelazko, Wiesław** A characterization of LC-nonremovable ideals in commutative Banach algebras. (82g:46095)
- secondary classifications:**
- Alexander, H.** On the area of the spectrum of an element of a uniform algebra. (82b:32015)
- Graham, Colin C.** See Parreau, François; et al., (82b:43002)
- Host, Bernard** See Parreau, François; et al., (82b:43002)
- Koldunov, A. V.** Strong local units in Orlicz spaces. (Russian) (82c:46034)
- Parreau, François** (with Host, Bernard; Graham, Colin C.) The interior of the Šilov boundary of $M(G)$ is trivial. (82b:43002)
- Větomov, E. M.** Ideals of rings of continuous functions. (Russian) (82g:54024)
- 46J25 Representations**
- Maltese, George** Integral representation theorems via Banach algebras. (82j:46067)
- Mišenko, A. S.** (with Solov'ev, Ju. P.) Representations of Banach algebras and formulas of Hirzebruch type. (Russian) (82f:46059)
- Solov'ev, Ju. P.** See Mišenko, A. S., (82f:46059)
- secondary classifications:**
- Evans, Richard** Embedding $C(K)$ in $B(X)$. (82j:47020)
- Kosiek, Marek** A property of measures orthogonal to a tensor product of function algebras. (Russian summary) (82j:46064)
- Decomposition and spectral properties of operator representations of the algebra $R(K_1 \times K_2)$. (Russian summary) (82j:46064b)
- Romo, John G.** Spectral synthesis in Banach modules. I. (82g:46118)
- 46J30 Subalgebras**
- Suh, Sungwoo** The space of real parts of algebras of Fourier transforms. (82j:46068)
- secondary classifications:**
- Sawoń, Zbigniew** (with Warzecha-Sawoń, Aleksandra) Maximal subalgebras of algebra $C(X)$. (Russian summary) (82g:46090)
- Warzecha-Sawoń, Aleksandra** See Sawoń, Zbigniew, (82g:46090)
- 46J35 Structure, classification**
- Andrew, Alfred D.** (with Green, William L.) On James' quaireflexive Banach space as a Banach algebra. (82d:46077)
- Dales, H. G.** Norming nil algebras. (82j:46069)
- Green, William L.** See Andrew, Alfred D., (82d:46077)
- Scheffold, Egon** FF-Banachverbandsalgebren. (82f:46060)
- secondary classifications:**
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- (Shaing, H.) See Srinivasan, V. K., (82b:46067)
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46L50 Noncommutative integration, noncommutative probability

- Barnett, Christopher Supermartingales on semifinite von Neumann algebras. 82b:46085
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- Accardi, Luigi Markov processes in quantum theory. (See 82j:82003)
 Alberverio, Sergio (with Hoegh-Krohn, Raphael) The method of Dirichlet forms. (82d:81066)
 Fedorov, A. L. Pairs of measurable partitions, polymorphisms and von Neumann algebras. (Russian) (82f:28020)
 Hoegh-Krohn, Raphael See Alberverio, Sergio, (82d:81066)
 Niculescu, Ștefan P. On the law of large numbers in universal semifields. (82j:60048)

46L55 Noncommutative dynamical systems [See also 28Dxx.]

- Alberverio, Sergio (with Hoegh-Krohn, Raphael) Ergodic actions by compact groups on C^\ast -algebras. 82b:46087
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- Cuntz, Joachim (with Pedersen, Gert Kjaergård) Equivalence and KMS states on periodic C^* -dynamical systems. 82j:46085
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- Alberti, Peter M. (with Uhlmann, Armin) Existence and density theorems for stochastic maps on commutative C^* -algebras. (82e:46087)
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- Accardi, Luigi Markov processes in quantum theory. (See 82j:82003)
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Alberti, Peter M. Fortsetzungssätze für Markovsche Halbgruppen stochastischer und spürhaltender linearer Abbildungen über Matrixalgebren. (82a:47037)
Alberverio, Sergio (with Hoegh-Krohn, Raphael) Some Markov processes and Markov fields in quantum theory, group theory hydrodynamics and C^* -algebras. (82j:60127)
Anselvič, V. V. First integrals and stationary states of the Heisenberg quantum spin dynamics. (Russian. English summary) (82g:82013)
Banai, Miklós Propositional systems in local field theories. (82g:81007)
Bratteli, Ola Dynamical stability and the KMS condition in quantum statistical mechanics. (See 82j:82003)
(with Robinson, Derek W.) Equilibrium states of a Bose gas with repulsive interactions. (82b:82022)
(with Robinson, Derek W.) ★Operator algebras and quantum-statistical mechanics. II. (82k:82013)
Carey, A. L. (with Hurst, C. A.) A C^* -algebra approach to the Schwinger model. (82i:81077)
Cyranski, John F. Entropy in classical and quantum physics. (82j:81006)
Dadaşjan, K. Ju. (with Horuži, S. S.) Conditional expectations on von Neumann algebras and causal independence of quantum fields. (Russian. English summary) (82j:81036)
Frigerio, Alberto (with Spohn, Herbert) Stationary states of quantum dynamical semigroups and applications. (See 82j:82003)
Fröhlich, Jürg On the mathematics of phase transitions and critical phenomena. (82k:82006)
Ghikas, Demetris P. K. An axiomatic framework for supersymmetries. (82j:81038)
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Gudder, Stanley P. Statistical inference in quantum mechanics. (82a:81004)
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Naudts, J. Gaussian states on the algebra of the infinite classical system. (82g:82010)
Ohya, Masanori On open system dynamics—an operator algebraic study. (82c:82024)
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Quaegebeur, J. (with Verbeure, A.) Stability for mean field models. (82a:82014)
Reents, G. See Polley, L.; et al., (82k:81034)
Robinson, Derek W. See Bratteli, Ola, (82b:82022) and (82k:82013)
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46L99 None of the above, but in this section

- De Camière, Jean (with Enock, Michel; Schwartz, Jean-Marie) Sur deux résultats d'analyse harmonique non-commutative: une application de la théorie des algèbres de Kac. 82h:46090
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- Schwartz, Jean-Marie See De Cannière, Jean; et al., 82b:46090
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secondary classifications:

- Ajupov, S. A. Matrix OI-algebras. (Russian) (82b:17014)
 (with Usmanov, S. M.) R -topologies in OI-algebras. (Russian) (82j:17021)
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 Wu, Cong Xin Perfect matrix algebras. I. The problems of multiplicative continuity. (Chinese. English summary) (82c:46062)

46Mxx Categorical methods [See also 18–XX.]

secondary classifications:

- Grosser, Michael ★Bidualräume und Vervollständigungen von Banachmoduln. (German) [Bidual spaces and completions of Banach modules] (82i:46075)

46M05 Tensor products

- Colojoară, Alexandra Algèbre symétrique du dual d'un espace nucléaire-DF. 82j:46090
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 Hudalov, V. T. Crossnorms on a tensor product connected with order. (Russian) 82g:46112
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 Leih, Thomas J. See Gilbert, John E., 82k:46098
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- Carne, T. K. Operator algebras. (82i:47070)
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 Li, Bing Ren Tensor products of C^* -algebras. (82k:46090)
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 Pugač, L. I. Flat ideals of Banach algebras. (Russian. English summary) (82c:46073)
 Valdivia, Manuel A representation of the space \mathcal{O}_M . (82c:46057)
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46M10 Projective and injective objects

- Banaschewski, B. Extension of invariant linear functionals: Hahn-Banach in the topos of M -sets. 82c:46081
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- Deciu, Elena On the wave functor. (Romanian summary) (82c:47009)
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 Lima, Ricardo Introduction to W^* -categories. (82f:46066)

46M20 Methods of algebraic topology (cohomology, sheaf and bundle theory, etc.) [See also 14F05, 18Fxx, 55Rxx.]

- Brown, Lawrence G. Ext of certain free product C^* -algebras. 82k:46100

- Deundjak, V. M. Homotopy properties of the set of Noether elements of a C^* -algebra of multidimensional generalized Toeplitz operators. (Russian) 82i:46104

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- Douglas, Ronald G. ★ C^* -algebra extensions and K -homology. 82c:46082

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 K -theory for commutants in the Calkin algebra. 82k:46101

Pechanec-Dražoš, Jaroslav Sheaves of Fréchet spaces. 82d:46097

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Pimsner, M. (with Popa, Sorin; Voiculescu, Dan) Homogeneous C^* -extensions of $C(X) \otimes K(H)$. I. 82c:46093a

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$C(X) \otimes K(H)$. II. 82c:46093b

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Connes, Alain An analogue of the Thom isomorphism for crossed products of a C^* -algebra by an action of \mathbb{R} . (82j:46084)

Fack, Thierry (with Skandalis, Georges) L'analogue de l'isomorphisme de Thom pour les groupes de Kasparov. (English summary) (82h:46077)

Fujii, Kazuyuki A representation of real K -groups by means of a Banach algebra. (82b:46061)

Harte, R. E. Invertibility, singularity and Joseph L. Taylor. (82m:47003)

Kandelaki, T. K. A theorem of stability in K -theory of C^* -algebras. (Russian. Georgian and English summaries) (82b:46073)

Kasparov, G. G. Hilbert C^* -modules: theorems of Stinespring and Voiculescu.

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McGovern, Richard (with Paulsen, Vern I.; Salinas, Norberto) A classification theorem for essentially binormal operators. (82i:47037)

Nielsen, Jens P. Cohomology of some nonselfadjoint operator algebras. (82k:47062)

O'Donovan, D. P. Unitary equivalence of essentially normal operators modulo the compacts. (82k:47036)

Paulsen, Vern I. See McGovern, Richard; et al., (82i:47037)

Pimsner, M. (with Voiculescu, Dan) Exact sequences for K -groups and Ext-groups of certain cross-product C^* -algebras. (82c:46074)

Power, S. C. Commutator ideals and pseudodifferential C^* -algebras. (82c:47033)

Putinar, Mihai A remark on the sheaf of distributions. (Romanian. French summary) (82j:46055)

Roberts, John E. Net cohomology and its applications to field theory. (82d:46096)

Rosenberg, Jonathan (with Schochet, Claude) The classification of extensions of C^* -algebras. (82a:46066)

Salinas, Norberto See McGovern, Richard; et al., (82i:47037)

Schochet, Claude See Rosenberg, Jonathan, (82a:46066)

Skandalis, Georges See Fack, Thierry, (82g:46077)

Sohrab, Houshang H. The C^* -algebra of the n -dimensional harmonic oscillator. (82i:35176)

Voiculescu, Dan See Pimsner, M., (82c:46074)

46M35 Abstract interpolation of topological vector spaces

Asekitova, I. U. The Holmstedt formula and an equivalence theorem for an n -set of Banach spaces. (Russian) 82j:46091

Berežnoi, E. I. Banach spaces, concave functions and interpolation of linear operators. (Russian) 82g:46114

Bergh, Jöran (with Löfström, Jörgen) ★Интерполяционные пространства. (Russian) [Interpolation spaces] 82c:46083

Brudnyi, Ju. A. (with Krugljak, N. Ja.) Functors of real interpolation. (Russian)

82g:46115

Cwikel, Michael (with Peetre, Jaak) Abstract K and J spaces. 82h:46092

Fernandez, Dicesar Lass On the interpolation of 2^n Banach spaces. I. The Lions-Peetre interpolation method. (Romanian summary) 82g:46116

(Krjučkov, V. S.) See Bergh, Jöran; et al., 82c:46083

Krugljak, N. Ja. See Brudnyi, Ju. A., 82g:46115

(Lizorkin, P. I.) See Bergh, Jöran; et al., 82c:46083

Löfström, Jörgen See Bergh, Jöran, 82c:46083

Milman, Mario On interpolation of 2^n Banach spaces and Lorentz spaces with mixed norms. 82g:46117

Ovčinnikov, V. I. Interpolation of operators of class \mathcal{S}_p in Hilbert couples. (Russian) 82d:46098

Peetre, Jaak See Cwikel, Michael, 82h:46092

- Vodop'janov, V. V. Interpolation of the property of complete continuity of operators in the interpolation constructions of A. Calderón. (Russian) **82i:46105**
 Zobin, N. M. (with Zobina, V. G.) Interpolation in spaces with given symmetries. Finite dimension. (Russian) **82m:46076**
 Zobina, V. G. See Zobin, N. M., **82m:46076**

secondary classifications:

- Andersen, Kenneth F. Inequalities for scalar-valued linear operators that extend to their vector-valued analogues. **(82b:46030)**
 Bahvalov, N. S. (with Berezin, B. I.; Bessonov, Ju. L.) Interpolation theorems for operators subordinate to several derivatives. (Russian) **(82e:46041)**
 Bennett, Colin (with DeVore, Ronald A.; Sharpley, Robert) Weak- L^∞ and BMO. **(82h:46047)**
 Berezin, B. I. See Bahvalov, N. S.; et al., **(82e:46041)**
 Berežnoi, E. I. Approximation spaces and interpolation. (Russian) **(82c:46037)**
 Bessonov, Ju. L. See Bahvalov, N. S.; et al., **(82e:46041)**
 Braverman, M. Š. (with Sedaev, A. A.) On a characteristic of symmetric spaces. (Russian) **(82j:46038)**
 Chan, L. Y. (with Chen, Yung-Ming; Liu, Ming Chit) Some properties of asymptotic functions. **(82g:26005)**
 Chen, Yung-Ming See Chan, L. Y.; et al., **(82g:26005)**
 DeVore, Ronald A. See Bennett, Colin; et al., **(82h:46047)**
 Ditzian, Z. On interpolation of $L_p[a, b]$ and weighted Sobolev spaces. **(82c:46038)**
 Gaspar, Dumitru On interpolation of weak-type operators. **(82g:46063)**
 Goodman, Roe Interpolation spaces and unitary representations. **(82m:22010)**
 Hudzik, H. (with Musielak, Julian; Urbanski, Ryszard) Some extensions of the Riesz-Thorin theorem to generalized Orlicz spaces $L_{\Phi}(T)$. **(82d:46046)**
 Jaroszewska, Magdalena On interpolation in the $L^{p,q}$ -spaces with mixed norms. **(82c:46033)**
 Jones, Peter W. Factorization of A_p weights. **(82b:46035)**
 Köhnen, Walter Einige Satzungssätze für n -parametrische Halbgruppen von Operatoren. **(82g:47029)**
 Liu, Ming Chit See Chan, L. Y.; et al., **(82g:26005)**
 Milman, Mario On the interpolation of martingale L^p spaces. **(82d:46048)**
 Musielak, Julian See Hudzik, H.; et al., **(82d:46046)**
 Pietsch, Albrecht Weyl numbers and eigenvalues of operators in Banach spaces. **(82i:47073a)**
 Racher, Gerhard On the dual of a certain operator ideal. **(82e:47061)**
 Sagher, Y. Real interpolation with weights. **(82e:46045)**
 Sedaev, A. A. See Braverman, M. Š., **(82j:46038)**
 Sharpley, Robert See Bennett, Colin; et al., **(82h:46047)**
 Triebel, Hans Complex interpolation and Fourier multipliers for the spaces $B_{p,q}^s$ and $F_{p,q}^s$ of Besov-Hardy-Sobolev type: the case $0 < p < \infty$, $0 < q < \infty$. **(82j:42016)**
 Urbanski, Ryszard See Hudzik, H.; et al., **(82d:46046)**
 Vodop'janov, V. V. Normal interpolation property of a family of Hölder spaces. (Russian) **(82e:46052)**
 Zaharjuta, V. P. Isomorphism of spaces of analytic functions. (Russian) **(82j:46032)**

46M40 Inductive and projective limits [See also 46A12.]

secondary classifications:

- Alexiewicz, Andrzej (with Kąkol, Jerzy) Gärting algebras. **(82i:46069)**
 Björn, Sten Einbettbarkeit in den Bidualraum und Darstellbarkeit als projektiver Limes in Kategorien von Limesvektorräumen. **(82d:46009)**
 Kąkol, Jerzy See Alexiewicz, Andrzej, **(82i:46069)**

46M99 None of the above, but in this section

- Fixman, Uri (with Zoritto, Frank A.) Direct summands of systems of continuous linear transformations. **82f:46076**
 Romo, John G. Spectral synthesis in Banach modules. I. **82g:46118**
 Zoritto, Frank A. See Fixman, Uri, **82f:46076**

secondary classifications:

- Charles, Bernard Opérateurs linéaires sur un espace de Banach et modules sur un anneau principal. **(82a:47018)**
 Faires, Barbara T. Varieties and vector measures. **(82a:46005)**
 Gutkin, E. Coefficients of Clebsch-Gordan for the holomorphic discrete series. **(82f:22013)**
 Helemskii, A. Ja. Homological methods in the holomorphic calculus of several operators in Banach space, after Taylor. (Russian) **(82c:47020)**
 Jajte, Ryszard Gleason measures. **(82d:46068)**
 Krée, Paul Espaces collectivement localement convexes. **(82h:46062a)**
 Krée, Paul Formes et coformes sur un espace nucléaire complet. **(82h:46062b)**
 Laursen, K. B. Automatic continuity of generalized intertwining operators. **(82i:46076)**
 Polley, L. On infinite direct products of Lorentz transformations. **(82b:81046)**
 Putinar, Mihai Functional calculus with sections of an analytic space. **(82i:32033)**
 Woronowicz, S. L. Pseudospaces, pseudogroups and Pontryagin duality. **(82e:46079)**

46N05 Miscellaneous applications of functional analysis

- Balakrishnan, A. V. ★Applied functional analysis. **82e:46094**

secondary classifications:

- Balakrishnan, A. V. ★Прикладный функциональный анализ. (Russian) [Applied functional analysis] **(82i:46001)**
 Barankin, Edward W. On the structure of procones. **(82j:92061)**

- Berman, Simeon M. (with Stewart, Alan L.) Application of ordered topological vector spaces in the modeling of visual difference thresholds. **(82g:92062)**
 (Blagodatskih, V. I.) See Balakrishnan, A. V., **(82i:46001)**
 Campanato, Sergio L^p regularity for weak solutions of parabolic systems. **(82h:35077)**
 Hlaváček, Ivan See Nečas, Jindřich, **(82h:73002)**
 Ionescu Tulcea, C. Ergodic theorems. I. **(82c:54037)**
 Kakihara, Yūichirō Stationary processes and information channels. **(82i:60076)**
 Kaneko, Hideaki (with Ruckle, William H.) Schauder decompositions, approximations and control problems. **(82i:49031)**
 Krée, Paul Mathematical analysis of the functional method in quantum field theory. (See **82i:81004a**)
 Nečas, Jindřich (with Hlaváček, Ivan) ★Mathematical theory of elastic and elasto-plastic bodies: an introduction. **(82h:73002)**
 Ruckle, William H. See Kaneko, Hideaki, **(82i:49031)**
 Sánchez-Palencia, Enrique ★Nonhomogeneous media and vibration theory. **(82j:35010)**
 Segal, I. E. The complex-wave representation of the free boson field. **(82d:81069)**
 Šilhavý, M. On measures, convex cones, and foundations of thermodynamics. I. Systems with vector-valued actions. **(82k:80001a)**
 On measures, convex cones, and foundations of thermodynamics. II. Thermodynamic systems. **(82k:80001b)**
 Skrzypczak, J. Frequency methods in Hilbert space theory of dynamic systems. (See **82k:70002b**)
 Stewart, Alan L. See Berman, Simeon M., **(82g:92062)**

46P05 Functional analysis over fields other than \mathbb{R} or \mathbb{C} ; non-Archimedean functional analysis [See also 12J25, 32E27.]

- Bastero Eleizalde, Jesús Minkowski convexity and semiconvexity. (Spanish) **82e:46095**
 Beckenstein, Edward (with Narici, Lawrence) Extending non-Archimedean norms on algebras. **82m:46077**
 Govaerts, W. Nachbin's theorem and sequentially continuous linear functionals for linearly topologized spaces. **82a:46081**
 Isobe, Kiro A certain example of non-Archimedean Riesz space. **82m:46078**
 Jain, Pawan Kumar On bases in spaces over non-Archimedean fields. **82i:46092**
 Kankurikar, R. S. On a generalization of Raghunathan's space of entire functions. I. (Italian summary) **82j:46093**
 Martínez Maurica, Javier Compactness in V -spaces. (Spanish) **82m:46079**
 Narici, Lawrence See Beckenstein, Edward, **82m:46077**
 Sunčlev, R. R. s -numbers of a completely continuous operator. (Russian) **82e:46082**
 Woodruff, David S. Complete function algebras with values in a uniform field. **82c:46084**

secondary classifications:

- Bartenwerfer, Wolfgang Die Lösung des nichtarchimedischen Corona-Problems für beliebige Dimension. **(82c:32016)**
 Kaljužnyi, V. N. Representations of a p -adic circle. (Russian) **(82k:12021)**
 Minić, Jan Some counterexamples in p -adic analysis. (Russian summary) **(82f:12025)**
 Prolla, João B. On the spectra of non-Archimedean function algebras. **(82k:32043)**
 (Shaing, H.) See Srinivasan, V. K., **(82h:46067)**
 Srinivasan, V. K. Corrigenda: "On some Gel'fand-Mazur-like theorems in Banach algebras" [Bull. Austral. Math. Soc. 20 (1979), no. 2, 211-215; MR 81e:46029a]; "On some Gel'fand-Mazur-like theorems in p -normed algebras" [ibid. 21 (1980), no. 2, 211-221; MR 81f:46058] with H. Shaing. **(82h:46067)**

47-XX OPERATOR THEORY

47-01 Elementary exposition, textbooks

- Ahiezer, N. I. (with Glazman, I. M.) ★Теория линейных операторов в Гильбертовом пространстве. Том I. (Russian) [Theory of linear operators in Hilbert space. Vol. I] **82g:47001a**
 (with Glazman, I. M.) ★Теория линейных операторов в Гильбертовом пространстве. Том II. (Russian) [Theory of linear operators in Hilbert space. Vol. II] **82g:47001b**
 Birman, M. Š. (with Solomjak, M. Z.) ★Спектральная теория самосопряженных операторов в гильбертовом пространстве. (Russian) [Spectral theory of selfadjoint operators in Hilbert space] **82k:47001**
 Friedrichs, Kurt Otto ★Spectral theory of operators in Hilbert space. **82j:47001**
 Glazman, I. M. See Ahiezer, N. I., **82g:47001**
 Solomjak, M. Z. See Birman, M. Š., **82k:47001**

secondary classifications:

- Balakrishnan, A. V. ★Applied functional analysis. **(82e:46094)**
 Fenyő, István ★Moderne mathematische Methoden in der Technik. Band 3. (German) [Modern mathematical methods in engineering. Vol. 3] **(82j:00024)**
 Herget, Charles J. See Michel, Anthony N., **(82k:00003)**
 Luecke, Glenn R. An elementary proof of the spectral theorem for normal operators with finite spectrum. **(82k:47035)**
 Michel, Anthony N. (with Herget, Charles J.) ★Mathematical foundations in engineering and science. **(82k:00003)**
 Trenogin, V. A. ★Функциональный анализ. (Russian) [Functional analysis] **(82k:46001)**
 Yosida, Kōsaku ★Functional analysis. **(82i:46002)**

47-02 Advanced exposition (research surveys, monographs, etc.)

- Bellini-Morante, Aldo ★Applied semigroups and evolution equations. **82f:47001**
 Kurpel', M. S. (with Šuvar, B. A.) ★Двусторонние операторные неравенства и их приложения. (Russian) [Two-sided operator inequalities and their applications] **82j:47002**

(Percy, Carl) See Topics in operator theory. 82c:47001
 Sarason, D. F. See Karpel, M. S. 82j:47002
 Operator theory ★Topics in operator theory. 82c:47001
 Topics in operator theory ★Topics in operator theory. 82c:47001

secondary classifications:

(Gankrelidze, R. V.) See Current problems in mathematics. (82d:47025)
 Gogundze, D. F. ★Об интегралах Колмогорова и их некоторых приложениях. (Russian) [Kolmogorov integrals and some of their applications] (82g:28001)
 (Goldin, Gerald A.) See Measure theory and its applications. (82g:28002)
 (Havin, V. P.) See Investigations on linear operators and the theory of functions. (82c:46002)
 (Hruščev, S. V.) See Investigations on linear operators and the theory of functions. (82c:46002)
 (Nikol'skii, N. K.) See Investigations on linear operators and the theory of functions. (82c:46002)
 (Wheeler, Robert F.) See Measure theory and its applications. (82g:28002)
 Complex analysis ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)
 Conference:

Measure Theory and its Applications ★Measure theory and its applications. (82g:28002)

Current problems in mathematics ★Современные проблемы математики. Том 13. (Russian) [Current problems in mathematics. Vol. 13] (82d:47025)
 DeKalb, III. ★Measure theory and its applications. (82g:28002)
 Function theory ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)
 Investigations on linear operators and the theory of functions ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)
 Itogi Nauki i Tekhniki ★Современные проблемы математики. Том 13. (Russian) [Current problems in mathematics. Vol. 13] (82d:47025)
 Linear analysis ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)
 Measure theory and its applications ★Measure theory and its applications. (82g:28002)
 Problems:
 Linear and complex analysis ★Исследования по линейным операторам и теории функций. (Russian) [Investigations on linear operators and the theory of functions] (82c:46002)

47-03 Historical (must also be assigned at least one classification number from Section 01)

Retherford, J. R. Trace. 82k:47002

secondary classifications:

(Murphy, R.) See Petrova, S. S., (82c:01030)
 Petrova, S. S. The origin of linear operator theory in the works of Servois and Murphy. (Russian. English summary) (82c:01030)
 (Servois, F. J.) See Petrova, S. S., (82c:01030)
 Sz-Nagy, Béla A brief review of my work in mathematics. (Russian) (82b:01061)
 Biography:
 Sz-Nagy, Béla See Sz-Nagy, Béla, (82b:01061)

47-04 Explicit machine computation and programs (not the theory of computation or programming)

secondary classifications:

Folias, Ciprian Contractive intertwining dilations and waves in layered media. (82a:47002)

47-06 Proceedings, conferences, etc.

(Berezans'kii, Ju. M.) See Spectral analysis of differential operators. 82k:47003
 (Fel'dman, I. A.) See Linear operators and integral equations. 82e:47001
 (Maksudov, F. G.) See Spectral theory of operators. 82b:47002
 (Rusu, G. I.) See Linear operators and integral equations. 82e:47001
 (Straus, A. V.) See Functional analysis. 82h:47001
 (Sveitka, I. V.) See Linear operators and integral equations. 82e:47001
 (Zabreiko, P. P.) See Qualitative and approximate methods for the investigation of operator equations. 82d:00006
 Functional analysis ★Функциональный анализ. Вып. 15. (Russian) [Functional analysis. No. 15] 82h:47001
 Integral equations ★Линейные операторы и интегральные уравнения. (Russian) [Linear operators and integral equations] 82e:47001
 Linear operators and integral equations ★Линейные операторы и интегральные уравнения. (Russian) [Linear operators and integral equations] 82e:47001
 Linear operators related to normal operators ★Linear operators related to normal operators. (Japanese) 82b:47001
 Operator equations ★Качественные и приближенные методы исследования операторных уравнений. (Russian) [Qualitative and approximate methods for the investigation of operator equations] 82d:00006
 Operators ★Спектральная теория операторов. Вып. 3. (Russian) [Spectral theory of operators. No. 3] 82h:47002
 Qualitative and approximate methods for the investigation of operator equations ★Качественные и приближенные методы исследования операторных уравнений. (Russian) [Qualitative and approximate methods for the investigation of operator equations] 82d:00006

Spectral analysis of differential operators ★Спектральный анализ дифференциальных операторов. (Russian) [Spectral analysis of differential operators] 82k:47003
 Spectral theory of operators ★Спектральная теория операторов. Вып. 3. (Russian) [Spectral theory of operators. No. 3] 82h:47002
 Symposium:

Linear Operators Related to Normal Operators ★Linear operators related to normal operators. (Japanese) 82h:47001

secondary classifications:

(Fadell, Edward) See Fixed point theory. (82m:55002)
 (Fournier, Gilles) See Fixed point theory. (82m:55002)
 (Havin, V. P.) See Complex analysis and spectral theory. (82m:46001)
 (Knowles, Ian W.) See Spectral theory of differential operators. (82k:34002)
 (Lewis, Roger T.) See Spectral theory of differential operators. (82k:34002)
 (Nikol'skii, N. K.) See Investigations on linear operators and the theory of functions. (82h:46002) and Complex analysis and spectral theory. (82m:46001)
 (Percy, Carl) See Topics in operator theory. (82c:47001)
 (Weron, Aleksander) See Probability theory on vector spaces. (82d:60004)
 Birmingham, Ala. ★Spectral theory of differential operators. (82k:34002)
 Błażejewko ★Probability theory on vector spaces. II. (82d:60004)
 Complex analysis and spectral theory ★Complex analysis and spectral theory. (82m:46001)

Conference:

Fixed Point Theory ★Fixed point theory. (82m:55002)
 Probability Theory on Vector Spaces ★Probability theory on vector spaces. II. (82d:60004)
 Spectral Theory of Differential Operators ★Spectral theory of differential operators. (82k:34002)

Differential equations and their applications ★Дифференциальные уравнения и их приложения. (Russian) [Differential equations and their applications] (82k:73002)
 Fixed point theory ★Fixed point theory. (82m:55002)
 Investigations on linear operators and the theory of functions ★Исследования по линейным операторам и теории функций. XI. (Russian) [Investigations on linear operators and the theory of functions. XI] (82h:46002)
 Leningrad ★Complex analysis and spectral theory. (82m:46001)
 Nonlinear functional analysis ★Nonlinear functional analysis. (82g:35004)
 Operator theory ★Topics in operator theory. (82c:47001)
 Probability theory on vector spaces ★Probability theory on vector spaces. II. (82d:60004)
 Seminar:

Complex Analysis and Spectral Theory ★Complex analysis and spectral theory. (82m:46001)

Sherbrooke, Que. ★Fixed point theory. (82m:55002)
 Spectral theory of differential operators ★Spectral theory of differential operators. (82k:34002)

Symposium:

Nonlinear Functional Analysis ★Nonlinear functional analysis. (82g:35004)
 Topics in operator theory ★Topics in operator theory. (82c:47001)
 Vector spaces ★Probability theory on vector spaces. II. (82d:60004)

47Axx Single linear operators: general theory

secondary classifications:

(Maksudov, F. G.) See Spectral theory of operators. (82b:47002)
 Operators ★Спектральная теория операторов. Вып. 3. (Russian) [Spectral theory of operators. No. 3] (82b:47002)
 Spectral theory of operators ★Спектральная теория операторов. Вып. 3. (Russian) [Spectral theory of operators. No. 3] (82h:47002)

47A05 General (adjoints, conjugates, products, inverses, domains, ranges, etc.)

Berg, Lothar Commutable right invertible operators. 82f:47002
 Binding, Paul Another positivity result for determinantal operators. 82e:47002
 Bittner, Ryszard (with Smentek, Zygfryd) Taylor's formula for many derivatives. Integrals. 82h:47002
 Bouldin, Richard The essential minimum modulus. 82f:47001
 Dierolf, Peter (with Dierolf, Susanne) Some spaces are not the domain of a closed linear operator in a Banach space. 82f:47003
 Dierolf, Susanne See Dierolf, Peter, 82f:47003
 Dudek, Zdzisław Some properties of Wronskian in QL-algebras. 82d:47001
 Fong, Che Kao (with Tsui, Sze Kai) A note on positive operators. 82d:47002
 Fujii, Jun-ichi (with Furuta, Takayuki) Holub's factorization and normal approximants of idempotent operators. 82k:47004
 Furuta, Takayuki See Fujii, Jun-ichi, 82k:47004
 Halperin, Israel On a theorem of Sterling Berberian. 82d:47002
 Holub, J. R. A note on Wiener-Hopf operators and projections. 82k:47005a
 Wiener-Hopf operators and projections. II. 82k:47005b
 Izumino, Saichi Inequalities on transforms of subspaces of a Hilbert space. 82d:47003
 Jørgensen, Palle E. T. Unbounded operators: perturbations and commutativity problems. 82e:47003
 Jory, Virginia V. Spectral representation and approximation of the generalized inverse of a closed linear operator. 82d:47002
 Longstaff, W. E. Subspace maps of operators on Hilbert space. 82k:47006
 Marias, Michel Transformations canoniques linéaires dans les espaces de Hilbert. 82m:47001
 Petunin, Ju. I. See Vinokurov, V. A.; et al., 82g:47002
 Pfeifer, Peter Adjoints of nondensely defined Hilbert space operators. 82f:47003
 Piłko, A. M. See Vinokurov, V. A.; et al., 82g:47002

- Šafiev, R. A. *L*-pseudoinversion. (Russian. Azerbaijani and English summaries) 82i:47004
- Schulz, Jürgen Über die Konstruktion von im allgemeinen unstetigen inversen Operatoren. 82d:47004
- Sen, Dilip Kumar On adjoint of an operator on reflexive Banach spaces. 82h:47003
- Smietek, Zygfryd See Bittner, Ryszard, 82h:47002
- Storož, O. G. On the question of the invertibility of second-order triangular operator matrices. (Russian) 82c:47003
- Representation of a boundary operator in the form of a sum of independent pairs. (Russian) 82c:47007
- Tsui, Sze Kai See Fong, Che Kao, 82d:47002
- Vinokurov, V. A. (with Petunin, Ju. I.; Pličko, A. M.) Measurability and regularizability of mappings that are inverses of continuous linear operators. (Russian) 82g:47002
- Weber, Robert E. On weak* continuous operators on $\mathcal{B}(\mathcal{H})$. 82j:47003

secondary classifications:

- Aguilella Almer, Joaquín See Burillo López, Pedro J., (82j:46027)
- Anselone, P. M. (with Nashed, M. Z.) Perturbations of outer inverses. (82c:47016)
- Burillo López, Pedro J. (with Aguilella Almer, Joaquín) Geometry of Gramians in Hilbert space. (Spanish. English summary) (82j:46027)
- Chuan, Jen Chung (with Chuan, Wai Fong) On the generalized Hadamard product and the Jordan-Hadamard product. (82c:46074)
- Chuan, Wai Fong See Chuan, Jen Chung, (82c:46074)
- Cobzas, Ștefan (with Muntean, Ioan) Condensation of singularities and divergence results in approximation theory. (82c:46004)
- Coimbra, Elvira ★ On operators that preserve the best approximation in vectorial-normed spaces. (82m:41030)
- Dash, A. T. Compact restrictions of several operators. (82c:47029)
- Edmunds, David E. (with Evans, W. D.) Spectral theory and embeddings of Sobolev spaces. (82c:47060)
- Evans, W. D. See Edmunds, David E., (82c:47060)
- Feintuch, Avraham Strong causality conditions and causal invertibility. (82c:47050)
- Fixman, Uri (with Zoritto, Frank A.) Direct summands of systems of continuous linear transformations. (82i:46076)
- Furuta, Takayuki An extension of the Fuglede-Putnam theorem to subnormal operators using a Hilbert-Schmidt norm inequality. (82c:47035)
- Galperin, A. M. (with Waksman, Zeev) On pseudo-inverses of operator products. (82f:15003)
- Imomnazarov, B. On the regularization of operator equations of the first kind in Hilbert space. (Russian) (82d:47020)
- Izumino, Saichi Inequalities on nilpotent operators. (82a:47003)
- Jory, Virginia V. Approximators to generalized inverses as regularizers of ill-posed problems. (82c:65033)
- Krasnosel'skii, M. A. (with Lifšic, E. A.; Pokornyi, Ju. V.; Stecenko, V. Ja.) Positive invertibility of linear operators. (Russian) (82f:47050)
- Laursen, K. B. Automatic continuity of generalized intertwining operators. (82i:46076)
- Lee, Sa Ge Absolute values of quasinilpotent operators. (82k:47008)
- Lee, Sung J. Coordinatized adjoint subspaces in Hilbert spaces, with application to ordinary differential operators. (82f:47033)
- Lifšic, E. A. See Krasnosel'skii, M. A.; et al., (82f:47050)
- Muntean, Ioan See Cobzas, Ștefan, (82c:46004)
- Nashed, M. Z. Best approximation problems arising from generalized inverse operator theory. (82c:47017)
- See also Anselone, P. M., (82c:47016)
- Pokornyi, Ju. V. See Krasnosel'skii, M. A.; et al., (82f:47050)
- Przeworska-Rolewicz, Danuta ★ Shifts and periodicity for right invertible operators. (82b:47012)
- Sohr, Hermann Ein neues Surjektivitätskriterium im Hilbertraum. (English summary) (82c:47051)
- Šolhet, D. M. Some analytic isomorphisms in a strictly convex Banach space and Cartan's theorem. (Russian) (82g:46086)
- Stecenko, V. Ja. See Krasnosel'skii, M. A.; et al., (82f:47050)
- Stout, Quentin F. Schur products of operators and the essential numerical range. (82h:47029)
- Vasilescu, F.-H. A duality theorem for distinguished mappings. (82j:46016)
- Vernik, A. N. Integral representation of vector functions and scalar character of operators in a Banach space. (Russian) (82h:47034)
- Waksman, Zeev See Galperin, A. M., (82f:15003)
- Zoritto, Frank A. See Fixman, Uri, (82f:46076)
- Zubov, V. M. On the question of the inversion of a Fredholm operator with nonequivalent substitution of variables. (Russian. English summary) (82f:47020)

47A10 Spectrum, resolvent

- Acharya, J. D. (with Sheth, I. H.) A note on essentially invariant classes of operators. 82a:47001
- Allahverdiev, B. P. See Maksudov, F. G., 82f:47008
- Antonevič, A. B. (with Antonevič, A. I.) Supplement to the examples of Lumer and Kakutani. (Russian. English summary) 82i:47004
- Antonevič, A. I. See Antonevič, A. B., 82f:47004
- Arora, S. C. See Yadav, B. S., 82f:47010
- Atanasov, Atanas Ivanov See Denkova, V.; et al., 82c:47004
- Buoni, John J. (with Dash, A. T.; Wadhwa, Bhushan L.) Joint Browder spectrum. 82c:47005
- Chō, Muneo (with Takaguchi, Makoto) On the joint Weyl spectrum. 82f:47005
- (with Takaguchi, Makoto) Boundary of Taylor's joint spectrum for two commuting operators. 82m:47002
- Colgen, Rainer Invariance of essential spectra. 82f:47006
- Dash, A. T. See Buoni, John J.; et al., 82f:47005
- Denkova, V. (with Atanasov, Atanas Ivanov; Radeva, R.) Operational calculus on the quasispectra of operator functions. 82c:47004
- Fialkow, Lawrence A. Essential spectra of elementary operators. 82b:47006
- Finch, James K. On the local spectrum and the adjoint. 82j:47004
- Harte, R. E. Invertibility, singularity and Joseph L. Taylor. 82m:47003
- Heinig, Georg Bezoutante, Resultante und Spektralverteilungsprobleme für Operatorpolynome. 82c:47005
- Isaev, G. A. Introduction to a general multiparameter spectral theory. (Russian) 82c:47004
- Kaufman, Robert P. Lipschitz spaces and Suslin sets. 82h:47005
- Labrousse, Jean-Philippe Relation entre deux définitions possibles du spectre essentiel d'un opérateur. 82f:47007
- Lee, Sa Ge Absolute values of quasinilpotent operators. 82k:47008
- Maksudov, F. G. (with Allahverdiev, B. P.) An analytic continuation through the continuous spectrum of the resolvent of perturbed operator functions. (Russian. Azerbaijani and English summaries) 82f:47008
- Muntean, Ioan The spectrum of the Cesaro operator. 82g:47003
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- Vernik, A. N. A spectral representation of operators acting in a Banach space. (Russian) 82c:47009
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- Zemánek, Jaroslav Generalisations of the spectral radius formula. 82k:47010

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- Abramov, Ju. Š. Duality in extremal problems generated by spectral problems for operator pencils. (Russian) (82k:50129)
- Aleksandrić, R. A. (with Mkrčjan, R. Z.) An analogue of Plancherel's theorem and the qualitative character of the spectrum of a selfadjoint operator. (Russian) (82b:47027)
- Alonso y Coria, Alberto (with Canavati, José A.) Some spectral properties of positive operators on a Banach space. (82k:47054)
- Arlins'kii, Ju. M. On the defect indices of the Hermitian components of unbounded operators. (Russian) (82j:47038)
- Aupetit, Bernard (with Gardner, L. Terrell) On a theorem of S. Berberian and I. Halperin. (82i:46070)
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- Cho, Sung Je Spectra of decomposable operators. (82d:47030)
- Curto, Raúl E. Spectral inclusion for doubly commuting subnormal n -tuples. (82j:47030)
- Demirbas, Mustafa Left and right spectra. (Turkish summary) (82f:46057)
- Duggal, B. P. On the spectrum of a class of integral transforms. (82b:44003)
- Erdelyi, I. Monotonic properties of some spectral resolvents. (82h:47031)
- Fainštein, A. S. See Isaev, G. A., (82k:46076)
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- Furuta, Takayuki Essentially convex operators. (82j:47058)
- Gardner, L. Terrell See Aupetit, Bernard, (82i:46070)
- Greiner, Günther Zur Perron-Frobenius-Theorie stark stetiger Halbgruppen. (82h:47063)
- Groh, Ulrich The peripheral point spectrum of Schwarz operators on C^* -algebras. (82i:46088)
- Gupta, Bal Chand (with Ramanujan, P. B.) A note on d -symmetric operators. (82c:47052)
- Guseinov, M. M. See Maksudov, F. G., (82f:47026)
- Harris, B. J. Some spectral gap results. (82i:47008)
- Herrero, Domingo A. Lifting essentially (G_1) operators. (82h:47012)
- Isaev, G. A. (with Fainštein, A. S.) Joint spectra of finite commutative families. (Russian) (82k:46076)
- Izuchi, Keiji (with Izuchi, Yuko) The spectral mapping theorem for the Weyl spectrum. (Japanese summary) (82h:47022)
- Izuchi, Yuko See Izuchi, Keiji, (82h:47022)
- Karaser, M. V. Asymptotic spectrum and oscillation front for operators with nonlinear commutation relations. (Russian) (82b:47028)
- Kiričenko, B. I. Some types of integral operators on the half-axis, reducing to operators depending on the difference and sum of arguments on the axis. (Russian) (82d:47035)
- Lerer, L. E. On approximating the spectrum of convolution-type operators. I. Wiener-Hopf matricial integral operators. (82a:47029)
- Lin, C. S. On Minkowski functionals in C^* -algebra. (82c:46090)
- Longstaff, W. E. Subspace maps of operators on Hilbert space. (82h:47006)
- Lutz, Dieter Eigenvalues and essential spectra of operators with A -spectral functions. (82k:47049)
- Ma, Ji Pu A spectral theory and analytic calculus for a linear operator. (Chinese. English summary) (82f:47021a)
- A polar spectral mapping theorem. (Chinese. English summary) (82f:47021b)
- Maksudov, F. G. (with Guseinov, M. M.) A quadratic pencil of operators in the presence of a continuous spectrum. (Russian. Azerbaijani and English summaries) (82f:47026)
- Martin, D. H. The spectra of bounded linear selfadjoint operators relative to a cone in Hilbert space. (82c:49008)
- Mkrčjan, R. Z. See Aleksandrić, R. A., (82b:47027)
- Murphy, Gerard J. Continuity of the spectrum and spectral radius. (82h:46066)

- Nadkarni, M. G. On spectra of nonsingular transformations and flows. (82j:47015)
- Najman, B. Spectral properties of the operators of Klein-Gordon type. (Serbo-Croatian summary) (82b:47042)
- Nakamoto, Ritsuo See Fujii, Masatoshi, (82a:47004)
- Neumann, Michael See de Pillis, John, (82i:15010)
- Patel, S. M. Joint normaloidity of operators. (Serbo-Croatian summary) (82j:47035)
- de Pillis, John (with Neumann, Michael) A noncommutative spectral theorem for operator entried companion matrices. (82i:15010)
- Pokrzywa, Andrzej Spectra of operators with fixed imaginary parts. (82a:15011)
- Ramamujan, P. B. See Gupta, Bal Chand, (82k:47052)
- Ramm, Alexander G. Spectral properties of some nonselfadjoint operators. (82j:47020)
- Schmidgen, Konrad Perturbations of selfadjoint operators with point spectra by restrictions and selfadjoint extensions. (82h:47024)
- Stout, Quentin F. Schur products of operators and the essential numerical range. (82h:47029)
- Straus, L. A. On the spectrum of an orthogonal extension of an isometric operator. (Russian) (82m:47009)
- Takaguchi, Makoto (with Chō, Muneo) Joint normaloid operator-family. (82j:47036)
- Varley, Robert See Carlson, Robert, (82c:34020)
- Vasilescu, F.-H. Commuting systems of operators and integral homomorphisms. (82c:47022)
- Spectral mapping theorem for the local spectrum. (82k:47022)
- Virahaj, G. V. Spectral expansion of the holomorphic operator-function with continuous spectrum. (Russian) (82g:47015)
- Voigt, Jürgen A perturbation theorem for the essential spectral radius of strongly continuous semigroups. (82b:47053)
- Weber, Robert E. On weak* continuous operators on $\mathfrak{B}(\mathfrak{H})$. (82j:47003)
- Xia, Dao Xing On the nonnormal operators—semihyponormal operators. (82g:47020)
- On the spectrum of hyponormal or semihyponormal operators. (82g:47021)

47A12 Numerical range

- de Barra, G. The boundary of the numerical range. 82c:47004
- Chō, Muneo (with Takaguchi, Makoto) Boundary points of joint numerical ranges. 82k:47011
- Das, Kiran Chandra (with Embry-Wardrop, Mary) Orthogonality and the numerical range. II. 82b:47006
- Embry-Wardrop, Mary See Das, Kiran Chandra, 82b:47006
- Jusubov, I. M. Joint numerical domain of elements of a Banach algebra. (Russian) 82b:47006
- The numerical range of a left-shift operator. (Russian) 82c:47006
- Legg, D. A. (with Townsend, D. W.) Essential numerical range in $B(l_1)$. 82c:47007
- Marcus, Marvin (with Wang, Bo Ying) Some variations on the numerical range. 82d:47007
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- Mboma, Bukele See Masamba, Sala Voka, 82d:47008
- Narcowich, Francis J. (with Ward, Joseph D.) A Toeplitz-Hausdorff theorem for matrix ranges. 82m:47004
- Takaguchi, Makoto See Chō, Muneo, 82k:47011
- Townsend, D. W. See Legg, D. A., 82c:47007
- Wang, Bo Ying See Marcus, Marvin, 82d:47007
- Ward, Joseph D. See Narcowich, Francis J., 82m:47004

secondary classifications:

- Deutsch, Emeric Nonnegative spectraloid matrices. (82h:15025)
- Furuta, Takayuki Essentially convexoid operators. (82j:47058)
- Goldberg, Moshe S. (with Straus, Ernst G.) Combinatorial inequalities, matrix norms, and generalized numerical radii. (82c:05024)
- Murphy, Gerard J. Continuity of the spectrum and spectral radius. (82h:46066)
- Patel, S. M. Joint normaloidity of operators. (Serbo-Croatian summary) (82j:47035)
- Phadke, S. V. See Thakare, N. K., (82a:47025)
- Smith, R. R. (with Ward, Joseph D.) Matrix ranges for Hilbert space operators. (82a:46067)
- (with Ward, Joseph D.) Locally isometric liftings from quotient C^* -algebras. (82a:46068)
- (with Ward, Joseph D.) The geometric structure of generalized state spaces. (82i:46094)
- Straus, Ernst G. See Goldberg, Moshe S., (82c:05024)
- Thakare, N. K. (with Phadke, S. V.) Conditions on ρ -oid operators implying normality. (82a:47025)
- Ward, Joseph D. See Smith, R. R., (82a:46067); (82a:46068) and (82i:46094)
- Young, N. J. Norm and spectral radius for algebraic elements of a Banach algebra. (82d:46071)

47A15 Invariant subspaces

- Andersen, Niels Toft Compact perturbations of reflexive algebras. 82c:47005
- Apostol, C. Functional calculus and invariant subspaces. 82j:47005
- Beauzamy, Bernard Sous-espaces invariants de type fonctionnel dans les espaces de Banach. 82d:47009a
- Sous-espaces invariants dans les espaces de Banach: quelques résultats positifs. 82j:47006
- Sous-espaces invariants de type fonctionnel dans les espaces de Banach. 82d:47009b
- Choi, Man Duen (with Laurie, Cecelia; Radjavi, Heydar) On commutators and invariant subspaces. 82d:47010
- Hadwin, Donald W. An addendum to: "Limsups of Lats" [Indiana Univ. Math. J. 29 (1980), no. 2, 293-311] by P. R. Halmos. 82c:47008b

- Halmos, P. R. Limsups of Lats. 82c:47008a
- See also Hadwin, Donald W., 82c:47008b
- Laurie, Cecelia Invariant subspace lattices and compact operators. 82c:47006
- See also Choi, Man Duen; et al., 82d:47010
- Moore, Robert L. Contractive commutants and invariant subspaces. 82j:47007
- Radjavi, Heydar See Choi, Man Duen; et al., 82d:47010
- Ševčik, V. V. Invariant subspaces of a linear operator in a pair of Banach spaces. (Russian. Georgian and English summaries) 82c:47007
- Suljagić, Salih Quaternionic Beurling's theorem. (Serbo-Croatian summary) 82i:47007
- Sum, Ji Guang Invariant subspaces and generalized invariant subspaces. II. Perturbation theorems. (Chinese. English summary) 82f:47011
- Wu, Pei Yuan C_{11} contractions are reflexive. II. 82j:47008
- Yadav, B. S. Attainable lattices. 82j:47009

secondary classifications:

- Beauzamy, Bernard A weighted bilateral shift with no cyclic vector. (82a:47032)
- Bercovici, Hari (with Foaş, Ciprian; Sz.-Nagy, Béla) Reflexive and hyper-reflexive operators of class C_0 . (82k:47017)
- Berger, Charles A. Intertwined operators and the Pincus principal function. (82j:47028)
- Chatterjee, Supriya See Yadav, B. S., (82d:47037)
- Cowen, Carl C. (with Rubel, Lee A.) A joint spectrum for shift invariant subspaces of H^2 of the polydisc. (82d:47043)
- Foaş, Ciprian See Sz.-Nagy, Béla, (82a:47010) and Bercovici, Hari; et al., (82k:47017)
- Lambrou, M. S. (with Longstaff, W. E.) Abelian algebras and reflexive lattices. (82b:47057)
- Longstaff, W. E. See Lambrou, M. S., (82b:47057)
- Nikol'skii, N. K. What problems do spectral theory and complex analysis solve for each other? (82a:30045)
- Nukherjee, R. N. A note on normality of operators. (82j:47027)
- Olin, Robert F. (with Thomson, James E.) Algebras of subnormal operators. (82a:47024)
- Putnam, C. R. The F. and M. Riesz theorem revisited. (82b:47026)
- Rubel, Lee A. See Cowen, Carl C., (82i:47043)
- Saito, Kichi-Suke Invariant subspaces for finite maximal subdiagonal algebras. (82m:46068)
- Sell, George R. A characterization of finite-dimensional translation invariant spaces. (82c:47054)
- Sz.-Nagy, Béla (with Foaş, Ciprian) The function model of a contraction and the space L^2/H_0^2 . (82a:47010)
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- Teodorescu, Radu I. Factorisations régulières et sous-espaces invariants. (82b:47010)
- Thomson, James E. See Olin, Robert F., (82a:47024)
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- Yadav, B. S. (with Chatterjee, Supriya) Invariant subspaces of weighted shifts. (Serbo-Croatian summary) (82d:47037)
- Operator algebras and their applications ★Operator algebras and their applications. (Japanese) (82b:46002)
- Symposium: Operator Algebras and their Applications ★Operator algebras and their applications. (Japanese) (82b:46002)

47A20 Dilations, extensions, compressions

- Foaş, Ciprian Contractive intertwining dilations and waves in layered media. 82a:47002
- Mlak, W. (with Szafraniec, Franciszek Hugon) Dilations with operator multipliers. 82j:47010
- (with Weron, Aleksander) Dilations of Banach space operator valued functions. 82b:47003
- Niemi, Hannu (with Weron, Aleksander) Dilation theorems for positive definite operator kernels having majorants. 82m:47005
- Peller, V. V. Analogue of J. von Neumann's inequality, isometric dilation of contractions and approximation by isometries in spaces of measurable functions. (Russian) 82k:47012
- Shonkwiler, Ron Dilations of reproducing kernels. 82k:47013
- Straus, L. A. Orthogonal extensions and the characteristic function of an isometric operator. (Russian) 82i:47008
- Szafraniec, Franciszek Hugon See Mlak, W., 82j:47010
- Weron, Aleksander See Mlak, W., 82b:47003 and Niemi, Hannu, 82m:47005

secondary classifications:

- Arsene, Grigore (with Ceauşescu, Zoia) On intertwining dilations. IV. (82d:47013a)
- (with Ceauşescu, Zoia; Foaş, Ciprian) On intertwining dilations. VII. (82d:47013c)
- (with Ceauşescu, Zoia; Foaş, Ciprian) On intertwining dilations. VIII. (82d:47013f)
- Ceauşescu, Zoia (with Foaş, Ciprian) On intertwining dilations. V. (82d:47013b)
- (with Foaş, Ciprian) On intertwining dilations. VI. (82d:47013d)
- (with Foaş, Ciprian) On intertwining dilations. V. (Letter to the editor). (82d:47013c)
- Lifting of a contraction intertwining two isometries. (82j:47016)
- See also Arsene, Grigore, (82d:47013a); (82d:47013c) and (82d:47013f)
- Foaş, Ciprian See Ceauşescu, Zoia, (82d:47013b); (82d:47013c); (82d:47013d); Arsene, Grigore; et al., (82d:47013e) and (82d:47013f)
- Hansen, Frank An operator inequality. (82a:46065)
- Kudrjašov, Ju. L. See Kužel, O. V., (82b:47039)
- Kužel, O. V. (with Kudrjašov, Ju. L.) Symmetric and selfadjoint dilations of dissipative operators. (Russian) (82b:47039)
- Rosenblum, Marvin (with Rovnyak, James) An operator-theoretic approach to theorems of the Pick-Nevanlinna and Loewner types. I. (82a:47016)

- Rovnyak, James. See Rosenblum, Marvin. (82a:47016)
 Singh, N. See Singh, R. P. (82d:47032)
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 Štraus, L. A. On the spectrum of an orthogonal extension of an isometric operator. (Russian) (82m:47009)

47A25 Spectral sets

- Muller, M. A. Joint spectral sets. 82j:47011
 Olin, Robert F. (with Thomson, James E.) Irreducible operators whose spectra are spectral sets. 82j:47012
 Thomson, James E. See Olin, Robert F. 82j:47012

secondary classifications:

- Ma, Ji Pu. A spectral theory and analytic calculus for a linear operator. (Chinese. English summary) (82i:47021a)
 A polar spectral mapping theorem. (Chinese. English summary) (82i:47021b)

47A30 Norms (inequalities, more than one norm, etc.)

- Abramov, Ju. Š. The minimax relation for a class of nonconvex functions generated by operator pencils. (Russian) 82k:47014
 Carl, Bernd. Inequalities between absolutely (p, q) -summing norms. 82i:47009
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 Pták, Vlastimil (with Young, N. J.) Functions of operators and the spectral radius. 82c:47009
 Ruzsa, I. Z. A pseudonorm for unbounded transformations. 82d:47011
 Young, N. J. See Pták, Vlastimil. 82c:47009

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- Krupnik, N. Ja. See Verbitskii, I. È. (82b:45005)
 Kwong, Man Kam (with Zettl, A.) Remarks on best constants for norm inequalities among powers of an operator. (82b:47040)
 Le Couteur, K. J. Representation of the function $\text{Tr}(\exp(A - \lambda B))$ as a Laplace transform with positive weight and some matrix inequalities. (82i:82019)
 Rogers, Donald D. (with Ward, Joseph D.) C_p -minimal positive approximants. (82i:47032)
 Verbitskii, I. È. (with Krupnik, N. Ja.) Exact constants in theorems on the boundedness of singular operators in L_p spaces with a weight and their application. (Russian) (82b:45005)
 Ward, Joseph D. See Rogers, Donald D. (82i:47032)
 Young, N. J. Matrices which maximise any analytic function. (82b:15016)
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47A35 Ergodic theory [See also 28Dxx.]

- Akcoglu, Mustafa A. Pointwise ergodic theorems in L_p spaces. 82b:47004
 (with del Junco, Andres) Differentiation of n -dimensional additive processes. 82k:47015
 Dunford, Nelson. Some ergodic theorems. 82a:47006
 Émilion, R. Processus additifs positifs dans L_∞ . 82k:47016
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 Kühne, R. Fixpunkteigenschaften einer Klasse positiver Operatoren in KB-Räumen. 82g:47005
 Lin, Michael. On weakly mixing Markov operators and nonsingular transformations. 82h:47007
 Lloyd, Stuart P. On the uniform ergodic theorem of Lin. 82j:47014
 Nadkarni, M. G. On spectra of nonsingular transformations and flows. 82j:47015
 Olsen, James H. The individual ergodic theorem for Lamperti contractions. 82h:47008
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- Becker, M. E. Multiparameter groups of measure-preserving transformations: a simple proof of Wiener's ergodic theorem. (82m:28031)
 Čencov, N. N. See Morozova, E. A. (82i:46072)
 Flytzanis, E. Unitary eigenoperators of ergodic transformations. (82a:28017)
 Foguel, Shaul R. ★ Selected topics in the study of Markov operators. (82h:60127)
 The Hopf decomposition of a Riesz space. (82m:47028)
 Goodson, G. R. (with Whitman, P. N.) On the spectral properties of a class of special flows. (82d:28017)

- Hsiao, Sheng Yen (with Lin, Charles S. C.) A sufficient condition for convergence of $\lim_{t \rightarrow \infty} t^{-1} \int_0^t \exp(-\tau T) A \exp(\tau S) d\tau$ for unbounded operators S and T . (82i:47064)
 Lin, Charles S. C. See Hsiao, Sheng Yen. (82i:47064)
 Lodkin, A. A. Approximation of dynamical systems and spectral theory in a factor of type II₁. (Russian) (82d:46092)
 Morozova, E. A. (with Čencov, N. N.) Algebra of bounded harmonic functions of a countable Markov chain (noncommutative theory). (Russian) (82i:46072)
 Veksler, A. S. Statistical ergodic theorem and statistical convergence of martingales in symmetric spaces. (Russian) (82k:60008)
 Whitman, P. N. See Goodson, G. R. (82d:28017)
 Yoshimoto, T. Some inequalities for ergodic power functions. (82c:28021)

47A40 Scattering theory [See also 34B25, 35P25, 47Dxx.]

- Beals, Richard. An abstract treatment of some forward-backward problems of transport and scattering. 82b:47005
 Deciu, Elena. On the wave functor. (Romanian summary) 82c:47009
 El Mabrouk, Mongi. Théorie spectrale et théorie de la diffusion en thermo-élasticité. (English summary) 82c:47010
 Howland, James S. (with Kato, Tosio) On a theorem of Ismagilov. 82c:47012
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- Amrein, W. O. (with Pearson, D. B.; Wollenberg, M.) Evanescence of states and asymptotic completeness. (82i:81124)
 Balslev, Erik. Analytic scattering theory of quantum mechanical three-body systems. (82b:81106)
 Analytic scattering theory for many-body systems below the smallest three-body threshold. (82d:81121)
 Ben-Artzi, Matania (with Devinatz, Allen) Spectral and scattering theory for the adiabatic oscillator and related potentials. (82a:35088a)
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 Brändas, Erkki. See Rittby, Magnus; et al. (82i:81128)
 Buhgeim, A. L. An inverse scattering problem in Kirchhoff's approximation. (Russian) (82c:35141)
 Chadan, K. (with Sabatier, P. C.) ★ Обратные задачи в квантовой теории рассеяния. (Russian) [Inverse problems in quantum scattering theory] (82c:81121)
 Chandler, Colston (with Gibson, A. G.) A two-Hilbert-space formulation of multichannel scattering theory. (See 82h:81117)
 Cho, Soon K. See Dolph, Charles L. (82h:78013)
 Coester, F. Canonical scattering theory for relativistic particles. (See 82b:81117)
 Combes, J. M. Recent developments in quantum scattering theory. (82b:81076)
 (with Weder, Ricardo) Spectral theory and unbounded obstacle scattering. (See 82k:34002)
 Coz, Marcel (with Rochus, Pierre) Extension of the Marchenko equation to non-Hermitian differential systems. (82c:81123)
 Davies, Edward Brian. Energy dependence of the scattering operator. (82d:81131)
 Devinatz, Allen. Schrödinger operators with singular potentials. (82c:35056)
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 Dolph, Charles L. (with Cho, Soon K.) On the relationship between the singularity expansion method and the mathematical theory of scattering. (82h:78013)
 Elander, Nils. See Rittby, Magnus; et al. (82i:81128)
 Gibson, A. G. See Chandler, Colston. (See 82h:81117)
 Giordano, R. (with Gutkowski, D.; Scalia, A.; Schiffer, G.) Scattering theory for a class of potentials, including both local and nonlocal ones. (Italian and Russian summaries) (82i:81127)
 Gutkowski, D. See Giordano, R.; et al. (82i:81127)
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 Iório, Rafael José, Jr. Perturbations of $-A$ that grow at infinity in certain directions. (82c:35060)
 Jafaev, D. R. Wave operators for the Schrödinger equation. (Russian) (82j:35119)
 Jensen, Arne. The scattering cross section and its Born approximation at high energies. (82d:81119)
 Katznelson, E. Decaying systems with degenerate Livsic matrix. (82c:81124)
 Khaze, Avinash. Rigorous inequalities in nonrelativistic quantum mechanics with applications to quarkonium spectroscopy. (82f:81077)
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- Pohjolainen, Seppo** (with Koivo, H. N.) Properties and calculation of transmission zeros for distributed parameter systems. (82c:93016)
- Rahston, James V.** See Majda, Andrew, (82b:58100)
- Ritby, Magnus** (with Elander, Nils; Brändas, Erkki) Weyl's theory and the complex-rotation method applied to phenomena associated with a continuous spectrum. (82b:81128)
- Robinson, Derek W.** Propagation properties in scattering theory. (82c:81126)
- Rochus, Pierre** See Cox, Marcel, (82c:81123)
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- Ruijsenaars, Simon N. M.** The continuum limit of the infinite isotropic Heisenberg chain in its ground state representation. (82b:82012)
- Sabatier, P. C.** See Chadan, K., (82c:81121)
- Scalia, A.** See Giordano, R.; et al., (82c:81127)
- Schiffner, G.** See Giordano, R.; et al., (82c:81127)
- Sigal, I. M.** Mathematical questions of quantum mechanics of many-body systems. (See 82b:81117)
- Strauss, Walter A.** Everywhere defined wave operators. (82c:47078)
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- Goldstein, Jerome A. (with Sandefur, James T., Jr.) Equipartition of energy for higher-order hyperbolic equations. (82b:34078)
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- Hilgers, John W. A note on estimating the optimal regularization parameter. (82c:65064)
- Jory, Virginia V. Spectral representation and approximation of the generalized inverse of a closed linear operator. (82c:47002)
- Approximators to generalized inverses as regularizers of ill-posed problems. (82c:65033)
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- Safiev, R. A. L -pseudoinversion. (Russian. Azerbaijani and English summaries) (82c:47004)
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- Smentek, Zygfryd See Bittner, Ryszard, (82b:34077)
- Song, Ch'ang Ho Variational methods for the solution of linear operator equations in Hilbert space. (Korean. English summary) (82d:65046)
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- Stafney, James D. A spectral mapping theorem for generating operators in second-order linear differential equations. (82c:34072)
- Tihonov, A. N. (with Arsenin, V. I.) ★Методы решения некорректных задач. (Russian) [Methods for the solution of ill-posed problems] (82c:65002)
- Tjurin, V. M. On the dichotomy of solutions of linear differential equations with almost periodic coefficients. (Russian. Azerbaijani and English summaries) (82b:34070)
- Ushijima, Teruo Note on the error estimate for the Newmark- β method applied to the second order linear evolution equation of hyperbolic type. (82g:65030)
- Vainikko, G. Error estimates of the successive approximation method for ill-posed problems. (82j:65034)
- Vasilevskii, N. L. (with Spitkovskii, I. M.) On the algebra generated by two projectors. (Russian. English summary) (82c:47063)
- Verma, R. U. Algebraic Fredholm type solutions of integral equations $(I + U/H)x = x_0$ in Banach spaces. (82c:45015)

47A53 Fredholm operators

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- den Boer, H. (with Thijse, G. Philip A.) Semistability of sums of partial multiplicities under additive perturbation. (82f:47021)
- Bozeman, Sylvia T. (with Kramarz, Luis) Finite rank modifications and generalized inverses of Fredholm operators. (82c:47017)
- Buraczewski, A. (with Sikorski, Roman) Analytic formulae for determinants systems in Banach spaces. (82b:47014)
- Curto, Raul E. Fredholm and invertible n -tuples of operators. The deformation problem. (82g:47010)
- Fainstein, A. S. (with Šul'man, V. S.) Fredholm complexes of Banach spaces. (Russian) (82c:47015)
- Imazeki, Kinji Characterizations of compact operators and semi-Fredholm operators. (82g:47011)
- Karlovic, Ju. I. (with Kravčenko, V. G.) A general method of investigation of operators of singular integral operator type with non-Carleman shift. (Russian) (82c:47018)
- Kramarz, Luis See Bozeman, Sylvia T., (82c:47017)
- Kravčenko, V. G. See Karlovic, Ju. I., (82c:47018)
- Lay, D. C. See Bart, H., (82c:47014)
- Lin, Michael Weak mixing for semigroups of Markov operators without finite invariant measures. (82c:47019)
- Nikaido, Gyokai On the normally solvable operators in Banach and Hilbert spaces. (82g:47012)
- Sikorski, Roman See Buraczewski, A., (82b:47014)
- Šul'man, V. S. See Fainstein, A. S., (82c:47015)
- Thijse, G. Philip A. See den Boer, H., (82f:47021)
- Truhil'o, R. See Vasilevskii, N. L., (82b:47015)
- Vasilevskii, N. L. (with Truhil'o, R.) On the theory of q -operators in matrix algebras of operators. (Russian) (82b:47015)

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- Bouldin, Richard The essential minimum modulus. (82c:47001)
- Fainstein, A. S. Stability of Fredholm complexes of Banach spaces with respect to perturbations which are small in q -norm. (Russian. Azerbaijani and English summaries) (82f:58009)
- Fialkow, Lawrence A. Essential spectra of elementary operators. (82c:47006)
- Heunemann, Dieter Local and global equivalence of holomorphic operator functions of several variables. (82j:32033a)
- Karapetjan, N. K. On the question of complete continuity of operators of convolution type. (Russian) (82d:47042)
- Komjak, I. I. On the normal Hausdorff solvability of a two-dimensional singular integral equation. (Russian) (82c:47037)
- Mjasnikov, A. G. Singular integral operators with non-Carleman shift and piecewise

- continuous coefficients. (Russian) (82c:47069)
- Pankov, A. A. Expandability of holomorphic Noetherian operator-valued functions. (Russian. Georgian and English summaries) (82c:47026)
- Power, S. C. Fredholm Toeplitz operators and slow oscillation. (82b:47032)
- Skorikov, A. V. Bisingular operators in convolutions and bipotentials in spaces with a mixed norm. (Russian) (82c:47038)
- Soldato, A. P. On the Noether theory of operators. One-dimensional singular integral operators of classical type. (Russian) (82a:47047)
- Vasilescu, F.-H. The stability of the Euler characteristic for Hilbert complexes. (82c:32022)
- Vasilevskii, N. L. Banach algebras that are generated by certain two-dimensional integral operators. I. (Russian) (82d:47053)
- Verma, R. U. Algebraic Fredholm type solutions of integral equations $(I + U/H)x = x_0$ in Banach spaces. (82c:45015)
- Zubov, V. M. On the question of the inversion of a Fredholm operator with nonequivalent substitution of variables. (Russian. English summary) (82f:47020)

47A55 Perturbation theory

- Anselone, P. M. (with Nashed, M. Z.) Perturbations of outer inverses. (82c:47016)
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- Faulkner, Gary D. See Campbell, Stephen L., (82c:47012)
- Fridlander, L. F. Certain spectral properties of very weak nonselfadjoint perturbations of selfadjoint operators. (Russian) (82c:47011)
- Greenlee, W. M. Singular perturbation of eigenvalues of semibounded operators. (82c:47022)
- Krupnik, N. Ja. Perturbation of operators of local type with respect to a certain ideal. (Russian) (82c:47017)
- Li, Bing Ren Perturbation theory for discrete spectral operators. (Chinese) (82f:47022)
- Macaev, V. I. See Markus, A. S., (82c:47018)
- Markus, A. S. (with Macaev, V. I.) Operators generated by sesquilinear forms and their spectral asymptotics. (Russian) (82c:47018)
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- See also Anselone, P. M., (82c:47016)
- Ramm, Alexander G. Expansion in eigenfunctions of nonselfadjoint operators. (Russian) (82c:47019)
- Spectral properties of some nonselfadjoint operators. (82c:47020)
- On the basis property for the root vectors of some nonselfadjoint operators. (82j:47019)
- Rofe-Beketov, F. S. Perturbations and Friedrichs extensions of semibounded operators on variable domains. (Russian) (82a:47013)

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- Allahverdiev, B. P. See Maksudov, F. G., (82f:47008)
- Antonevič, A. B. (with Antonevič, A. I.) Supplement to the examples of Lumer and Kakutani. (Russian. English summary) (82f:47004)
- Antonevič, A. I. See Antonevič, A. B., (82f:47004)
- Avron, Joseph E. (with Seiler, R.) Coincident anharmonic oscillators. (82d:81016)
- Bart, H. (with Lay, D. C.) The stability radius of a bundle of closed linear operators. (82c:47014)
- Bessis, G. See Bessis-Mazloum, Nadine; et al., (82d:81037)
- Bessis-Mazloum, Nadine (with Bessis, G.; Hadinger, G.) The perturbed ladder operator method: closed form expressions of perturbed wavefunctions and matrix elements. (82d:81037)
- Brodimas, G. See Jannussis, A. D.; et al., (82c:81016)
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- Cycon, Hans L. On the form sum and the Friedrichs extension of Schrödinger operators with singular potentials. (82b:47068)
- Daleckiĭ, Ju. L. Composite multiplicative integral of a formal power series. (Russian) (82f:58026)
- Fainstein, A. S. (with Šul'man, V. S.) Fredholm complexes of Banach spaces. (Russian) (82c:47015)
- Faris, William G. The Rayleigh-Schrödinger expansion of the Gibbs state of a classical Heisenberg ferromagnet. (82d:82006)
- Friedrichs, Kurt Otto ★Spectral theory of operators in Hilbert space. (82j:47001)
- Gazessu, J.-P. (with Maquet, A.) A new approach to the two-particle Schrödinger bound state problem. (82d:81019)
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- Hughes, Rhonda Jo See Kantorovitz, Samuel, (82j:47059)
- Iorio, Rafael José, Jr. Perturbations of $-A$ that grow at infinity in certain directions. (82c:35060)
- Jannussis, A. D. (with Patargias, N.) Wigner operator and Wigner distribution. (82c:81015)
- (with Patargias, N.; Brodimas, G.) Phase space and the Wigner equation. (82c:81016)
- Jørgensen, Palle E. T. Unbounded operators: perturbations and commutativity problems. (82c:47003)

- Kajuk, Ja. F. ★Некоторые вопросы методов разложения по параметру. (Russian) [Some questions of the methods of expansion with respect to a parameter] (82e:00037)
- Kantorovitch, Shmuel (with Hughes, Rhonda Jo) Similarity of certain singular perturbations in Banach space. (82j:47059)
- Kalčenko, M. P. See Verešagin, V. P., (82j:82038)
- Kay, Bernard S. On Klauder's pseudofree oscillator. (82d:81026)
- Kok, L. P. See van Haeringen, H., (82d:81032)
- Lancaster, P. See Gohberg, Israel; et al., (82b:47016)
- Landgren, J. J. (with Rejto, P. A.) On a theorem of Jörgens and Chernoff concerning essential selfadjointness of Dirac operators. (82j:81020)
- Lay, D. C. See Bart, H., (82c:47014)
- Lobo-Hidalgo, M. See Sánchez-Palencia, Enrique. (82b:35017)
- Macaev, V. I. See Markus, A. S., (82c:47027)
- Maioli, M. See Caliceti, E.; et al., (82d:81030)
- Maksimov, F. G. (with Allahverdiev, B. P.) An analytic continuation through the continuous spectrum of the resolvent of perturbed operator functions. (Russian. Azerbaijani and English summaries) (82f:47008)
- Maquet, A. See Gazeau, J.-P., (82d:81019)
- Markus, A. S. (with Macaev, V. I.) Convergence of expansions in eigenvectors of an operator that is nearly selfadjoint. (Russian) (82f:47027)
- Mihalec, V. A. Distribution of eigenvalues of operators that are close to selfadjoint. (Russian) (82d:47027)
- Milani, N. (with Minelli, T. A.; Pascolini, A.) An extension of Kato's perturbation theory to resonant states. (Italian summary) (82b:81033)
- Minelli, T. A. See Milani, N.; et al., (82b:81033)
- Morgan, John D., III (with Simon, Barry) The calculation of molecular resonances by complex scaling. (82d:81172)
- Najman, B. Perturbation theory for selfadjoint operators in Pontrjagin spaces. I. (Serbo-Croatian summary) (82e:47048)
- Nenciu, A. (with Nenciu, G.) Dynamics of Bloch electrons in external electric fields. I. Bounds for interband transitions and effective Wannier Hamiltonians. (82j:81069)
- Nenciu, G. See Nenciu, A., (82j:81069)
- Nikaido, Gyokai On the normally solvable operators in Banach and Hilbert spaces. (82g:47012)
- Pascolini, A. See Milani, N.; et al., (82b:81033)
- Patargias, N. See Jannussis, A. D., (82e:81015) and (82e:81016)
- Rejto, P. A. See Landgren, J. J., (82j:81020)
- Rěznikov, S. I. Limit theorems for singularly perturbed evolution operators. (Russian) (82g:47030)
- Rodman, Leiba See Gohberg, Israel; et al., (82b:47016)
- Rogers, Donald D. (with Ward, Joseph D.) C_p -minimal positive approximants. (82c:47032)
- Rostamian, Rouben Continuity properties of stationary points of quadratic functionals in Hilbert space. (82m:49032)
- Šafiev, R. A. On the stability of pseudoinversion. (Russian. Azerbaijani and English summaries) (82b:47010)
- Sánchez-Palencia, Enrique (with Lobo-Hidalgo, M.) Perturbation of spectral properties for a class of stiff problems. (82b:35017)
- Seller, R. See Avron, Joseph E., (82d:81016)
- Simon, Barry See Morgan, John D., III, (82d:81172)
- Sul'man, V. S. See Feinstein, A. S., (82c:47015)
- Turbin, A. F. Limit theorems and asymptotic expansions for singularly perturbed semigroups of operators. (Russian) (82g:47033)
- Verešagin, V. P. (with Kaščenko, M. P.) Isolation of a Markov approximation in the nonequilibrium statistical operator method. (Russian) (82j:82038)
- Wang, Ti Xiang On perturbation problems for unbounded linear operators with discrete spectrum and their applications. (Chinese. English summary) (82b:47016)
- Ward, Joseph D. See Rogers, Donald D., (82c:47032)
- 47A60 Functional calculus**
- Albrecht, Ernst (with Neumann, Michael) On the continuity of nonanalytic functional calculi. 82m:47013
- Ando, T. (with Suci, Ion; Timotin, D.) Characterization of some Harnack parts of contractions. 82a:47014
- Evans, Richard Embedding $C(K)$ in $B(X)$. 82j:47020
- Fan, Ky Harnack's inequalities for operators. 82d:47023
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- Helemskii, A. Ja. Homological methods in the holomorphic calculus of several operators in Banach space, after Taylor. (Russian) 82e:47020
- Hwang, Jun Shung Some analogs of function theory in operator theory. 82d:47024
- Ma, Ji Pu A spectral theory and analytic calculus for a linear operator. (Chinese. English summary) 82c:47021a
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- Neumann, Michael See Albrecht, Ernst, 82m:47013
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- Rovnyak, James A converse to von Neumann's inequality. 82k:47021
- See also Rosenblum, Marvin, 82a:47016
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- Itogi Nauki i Tehniki ★Современные проблемы математики. Том 13. (Russian) [Current problems in mathematics. Vol. 13] 82d:47025
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- Atanasov, Atanas Ivanov See Denkova, V.; et al., (82e:47004)
- Denkova, V. (with Atanasov, Atanas Ivanov; Radeva, R.) Operational calculus on the quasispaces of operator functions. (82e:47004)
- Fujii, Jun-ichi Operator-concave functions and means of positive linear functionals. (82c:47026)
- Kosiek, Marek Lebesgue-type decompositions of a pair of commuting Hilbert space operators. (Russian summary) (82j:46064c)
- Prák, Vlastimil (with Young, N. J.) Functions of operators and the spectral radius. (82e:47009)
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- 47A62 Equations involving linear operators, with operator unknowns**
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- (with Vinničuk, S. D.) Description of solutions of an operator equation in the space $A(G)$. (Russian) 82a:47017
- Duggal, B. P. (with Khalagai, J. M.) On the operator equation $AB + BA^* = A^*B + BA = I$. 82m:47014
- Khalagai, J. M. See Duggal, B. P., 82m:47014
- Nagnibida, M. I. See Berezovskii, M. I., 82k:47023
- Przytycki, K. Maciej The Lyapunov equation and the problem of stability for linear bounded discrete-time systems in Hilbert space. 82f:47023
- Vinničuk, S. D. See Berezovskii, M. I., 82a:47017
- secondary classifications:
- Prák, Vlastimil An equation of Lyapunov type. (82h:15020)
- Talagrand, Michel Sur la \mathcal{K} -analyticité de certains espaces d'opérateurs. (English summary) (82a:47042)
- Wang, Alan P. Dissipative properties of a nonlinear differential operators equation. (82b:35147)
- 47A65 Structure theory**
- Charles, Bernard Opérateurs linéaires sur un espace de Banach et modules sur un anneau principal. 82a:47018
- Fialkow, Lawrence A. Weighted shifts quasimimilar to quasinilpotent operators. 82c:47018
- Gevorkjan, L. Z. Representability of operators in the form of an operator of multiplication by an independent variable. (Russian) 82a:47019
- A functional model for a class of nonselfadjoint operators. (Russian. Armenian summary) 82f:47024
- Herrero, Domingo A. Lifting essentially (G_*) operators. 82b:47012
- Li, Hao Best positive approximants of operators. (Chinese) 82k:47024
- Livšic, M. S. A method for constructing triangular canonical models of commuting operators based on connections with algebraic curves. 82b:47013
- Moore, Robert L. Normal direct summands of hyporeductive operators. 82a:47020
- Rusak, Ju. B. Some questions of the Jordan structure of an analytic operator-valued function. (Russian) 82j:47021
- secondary classifications:
- Beauzamy, Bernard (with Rome, Michel) Représentation fonctionnelle des séries convergentes utilisant les itérés d'un point par une contraction de classe C_1 . (English summary) [Functional representation of convergent series using iterates of a point by a class C_1 contraction] (82c:47010)
- Fujii, Jun-ichi (with Furuta, Takayuki) Holub's factorization and normal approximants of idempotent operators. (82c:47004)
- Furuta, Takayuki See Fujii, Jun-ichi, (82c:47004)
- Gohberg, Israel (with Lancaster, P.; Rodman, Leiba) Spectral analysis of selfadjoint matrix polynomials. (82c:15010)
- Herrero, Domingo A. Quasidiagonality, similarity and approximation by nilpotent operators. (82j:47022)
- Holub, J. R. A note on Wiener-Hopf operators and projections. (82k:47005a)
- Wiener-Hopf operators and projections. II. (82k:47005b)
- Lancaster, P. See Gohberg, Israel; et al., (82c:15010)
- Rodman, Leiba See Gohberg, Israel; et al., (82c:15010)
- Rome, Michel See Beauzamy, Bernard, (82c:47010)
- Wrobel, Volker The asymptotic behavior of polynomially compact operators. (82a:47023)
- Zolotarev, V. A. Structure and triangular models of systems of a class of commuting operators. (Russian) (82d:47015)
- 47A66 (Non)quasitriangular, (non)quasidiagonal operators**
- Herrero, Domingo A. Quasidiagonality, similarity and approximation by nilpotent operators. 82j:47022
- secondary classifications:
- Williams, Lynn R. Quasimilarity and hyponormal operators. (82f:47030)
- 47A67 Representation theory**

47A68 Factorization theory

- Bart, H. (with Gohberg, Israel; Kaashoek, M. A.; Van Dooren, Paul M.) Factorizations of transfer functions. **82c:47024**
- Gohberg, Israel (with Lancaster, P.; Rodman, Leiba) Perturbation theory for divisors of operator polynomials. **82b:47016**
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- Heinig, Georg Linearisierung und Realisierung holomorpher Operatorfunktionen. **82c:47025**
- Kaashoek, M. A. See Bart, H.; et al., **82c:47024**
- Lancaster, P. See Gohberg, Israel; et al., **82b:47016**
- Mereuca, I. V. The decomposition of a polynomial operator pencil into linear factors. (Russian) **82c:47025**
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(with Taragan, D. I.) Divisors of a holomorphic operator-valued function. (Russian) **82c:47014**
- Nakazi, Takahiko A note on the factorization of operator-valued functions. **82c:47019**
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- Rodman, Leiba See Gohberg, Israel; et al., **82b:47016**
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- Van Dooren, Paul M. See Bart, H.; et al., **82c:47024**
- Virahjan, G. V. Spectral decomposition of a holomorphic operator-function with continuous spectrum. (Russian. Armenian and English summaries) **82f:47025**
- secondary classifications:
- Gohberg, Israel (with Rodman, Leiba) On spectral analysis of nonmonic matrix and operator polynomials. II. Dependence on the finite spectral data. (**82a:15009**)
(with Kaashoek, M. A.; Lerer, L. E.; Rodman, Leiba) Common multiples and common divisors of matrix polynomials. I. Spectral method. (**82j:15019**)
- Kaashoek, M. A. See Gohberg, Israel; et al., (**82j:15019**)
- Lerer, L. E. See Gohberg, Israel; et al., (**82j:15019**)
- Porter, William A. On factoring the polyvariance operator. (**82c:93095**)
- Rodman, Leiba See Gohberg, Israel, (**82a:15009**) and (**82j:15019**)
- Thijse, G. Philip A. Rules for the partial multiplicities of the product of holomorphic matrix functions. (**82a:15020**)
- 47A70 Eigenfunction expansions, rigged Hilbert spaces; eigenvalue problems in general [See also 49Gxx.]

- Allahverdiev, B. P. See Maksudov, F. G., **82g:47014**
- Allahverdieva, N. K. Sufficient completeness criterion for an operator pencil in a Banach space. (Russian. Azerbaijani and English summaries) **82b:47015**
- Berezans'kii, Ju. M. Selfadjoint differential operators acting in spaces of functions of an infinite number of variables. (Russian) **82b:47018**
- Binding, Paul On the use of degree theory for nonlinear multiparameter eigenvalue problems. **82a:47021**
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- Browne, Patrick J. See Binding, Paul, **82i:47022**
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- Ganguly, K. On the existence of a solution for a slab critical problem. **82b:47019**
- Guseinov, M. M. See Maksudov, F. G., **82f:47026**
- Isaev, G. A. The root elements of multiparameter spectral problems. (Russian) **82c:47021**
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- Jørgensen, Palle E. T. Point-spectrum of semibounded operator extensions. **82c:47028**
- Kaashoek, M. A. (with van de Ven, M. P. A.) A linearization for operator polynomials with coefficients in certain operator ideals. **82b:47020**
- Kauffman, Robert M. A differentiability property and its application to the spectral theory of differential operators. **82c:47029**
- Khalifah, Mohammed F. An upper bound for the subdominant eigenvalue of a linear operator. (See **81j:76001**)
- Kolomý, Josef Determination of eigenvalues and eigenvectors of selfadjoint operators. **82g:47013**
- Kopačevs'kii, N. D. On the properties of being a basis for the eigen- and associated vectors of the selfadjoint operator pencil $I - \lambda A - \lambda^{-1} B$. (Russian) **82j:47023**
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- Macaev, V. I. See Markus, A. S., **82f:47027**
- Maksudov, F. G. (with Guseinov, M. M.) A quadratic pencil of operators in the presence of a continuous spectrum. (Russian. Azerbaijani and English summaries) **82f:47026**
(with Allahverdiev, B. P.) Multiple expansion in generalized eigen- and associated vectors of a class of operator-valued functions in the presence of a continuous spectrum. (Russian. Azerbaijani and English summaries) **82g:47014**
- Markus, A. S. (with Macaev, V. I.) Convergence of expansions in eigenvectors of an operator that is nearly selfadjoint. (Russian) **82f:47027**
- Mihailuc, V. A. Distribution of eigenvalues of operators that are close to selfadjoint. (Russian) **82d:47027**
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- Oroško, Ju. B. Some properties of expansions in generalized eigenfunctions of Carleman selfadjoint operators. (Russian) **82c:47030**
- Pietsch, Albrecht Über die Verteilung von Fourierkoeffizienten und Eigenwerten—nicht nur ein historischer Überblick. (Russian and English summaries) **82c:47022**
- Slivnik, Tomaž See Tomšič, Gabrijel, **82b:47021**
- Šterengas, S. S. Riesz summability of Fourier series in eigenfunctions of an abstract operator. (Russian) **82c:47031**
- Tomšič, Gabrijel (with Slivnik, Tomaž) On multiparameter problems. (Slovenian. English summary) **82b:47021**
- van de Ven, M. P. A. See Kaashoek, M. A., **82b:47020**
- Virahjan, G. V. Spectral expansion of the holomorphic operator-function with continuous spectrum. (Russian) **82g:47015**
- Wang, Ti Xiang On perturbation problems for unbounded linear operators with discrete spectrum and their applications. (Chinese. English summary) **82b:47016**
- Zil'bergleit, A. S. (with Kopilevič, Ju. I.) On properties of waves associated with quadratic operator pencils. (Russian) **82b:47017**

secondary classifications:

- Berger, W. A. See Kreuzer, K.-G.; et al., (**82c:47037**) and (**82i:47032**)
- Binding, Paul On generalised and quadratic eigenvalue problems. (**82c:49059**)
- Birman, M. Š. Quasiclassical spectral asymptotic behavior of a class of integral operators. (Russian. English summary) (**82i:47083**)
- Budak, A. B. Expansion in eigenfunctions of a fourth-order differential operator with discontinuous coefficients. (Russian) (**82i:47079**)
- Dreizler, R. M. See Kreuzer, K.-G.; et al., (**82f:47032**)
- Dunford, Nelson An expansion theorem. (**82i:47048**)
- Gazdy, B. Nested Hilbert spaces, complex canonical transformations and resonances. (**82k:81012**)
- Gevoorkjan, L. Z. Representability of operators in the form of an operator of multiplication by an independent variable. (Russian) (**82a:47019**)
- Gold'sheid, I. Ja. Structure of the spectrum of the Schrödinger random difference operator. (Russian) (**82k:60138**)
- Greenlee, W. M. Singular perturbation of eigenvalues of semibounded operators. (**82d:47022**)
- Herman, I. A Hamiltonian defined in $L^2(\text{SO}(3), \lambda)$. (**82i:81031**)
- Heunemann, Dieter On the diagonalization of holomorphic matrix functions of several variables. (**82j:3203b**)
- Himič, A. N. A nonstationary scheme of the alternate-triangular method for calculation of eigenvalues. (Russian) (See **82i:65002**)
- Hoffmann-Ostenhof, Maria (with Seiler, R.) Cusp conditions for eigenfunctions of n -electron systems. (**82b:81023**)
- Hromov, A. P. Equiconvergence of expansions in eigen- and associated functions of integral operators. (Russian) (**82i:47086**)
- Isaev, G. A. Introduction to a general multiparameter spectral theory. (Russian) (**82b:47004**)
- Kolomichev, V. I. (with Samoilenko, Ju. S.) The countable selection of commuting selfadjoint operators and canonical noncommutation relations. (Russian) (**82c:47029**)
- Kolomý, Josef Approximate determination of eigenvalues and eigenvectors of selfadjoint operators. (**82j:65022**)
An approximate method for determination of eigenvalues and eigenvectors of selfadjoint operators. (Czech summary) (**82i:65036**)
- Kreuzer, K.-G. (with Miller, H. G.; Dreizler, R. M.; Berger, W. A.) Extension of an iterative method to obtain low-lying eigenstates of unbounded Hermitian operators. (**82f:47032**)
(with Miller, H. G.; Berger, W. A.) The Lanczos algorithm for selfadjoint operators. (**82c:47037**)
- Li, Bing Ren Perturbation theory for discrete spectral operators. (Chinese) (**82f:47022**)
- Macaev, V. I. See Markus, A. S., (**82f:47034**)
- Maksudov, F. G. (with Pašaeva, È. È.) Multiple expansion in eigenfunctions of a one-dimensional nonselfadjoint differential operator of even order on the half axis. (Russian) (**82i:47081**)
- Markus, A. S. (with Macaev, V. I.) Asymptotic behavior of the spectrum of close-to-normal operators. (Russian) (**82f:47034**)
- Miller, H. G. See Kreuzer, K.-G.; et al., (**82c:47037**) and (**82f:47032**)
- Pašaeva, È. È. See Maksudov, F. G., (**82i:47081**)
- Pietsch, Albrecht Weyl numbers and eigenvalues of operators in Banach spaces. (**82i:47073a**)
Eigenvalues of integral operators. I. (**82i:47073b**)
- Popper, Györgi See Tarnai, T., (**82c:73046**)
- Ramm, Alexander G. Expansion in eigenfunctions of nonselfadjoint operators. (Russian) (**82i:47019**)
Spectral properties of some nonselfadjoint operators. (**82i:47020**)
On the basis property for the root vectors of some nonselfadjoint operators. (**82j:47019**)
- Robnik, Marko On adiabatic invariants and continuous large-scale deformations of QM energy spectra. (**82b:81027**)
- Samoilenko, Ju. S. See Kolomichev, V. I., (**82c:47029**)
- Seiler, Erhard Some remarks on the fermion determinants in gauge theories. (**82b:81072**)
- Seiler, R. See Hoffmann-Ostenhof, Maria, (**82b:81023**)
- Shih, Chia C. See Wongtawutugool, C.; et al., (**82c:15008**)
- Tarnai, T. Lateral buckling analysis of beams by the theory of quadratic operator pencils. (**82b:73031**)
(with Popper, Györgi) Solution of flexural-torsional problem of beams by series expansion in eigenfunctions of quadratic operator pencils. (**82c:73046**)
- Virahjan, G. V. Spectral decomposition of a holomorphic operator-function with continuous spectrum. (Russian. Armenian and English summaries) (**82f:47025**)
- Wongtawutugool, C. (with Wu, Shi Yu; Shih, Chia C.) Eigenvalue problem for an infinite tridiagonal matrix. (**82c:15008**)
- Wu, Shi Yu See Wongtawutugool, C.; et al., (**82c:15008**)

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- Noor, M. Aslam A constructive proof of the Lax-Milgram lemma. **82c:47023**
 Torgaev, Aleksandar Characteristic operator functions on Wachs spaces. **82c:47027**

secondary classifications:

- Aravena, Jorge L. (with Porter, William A.) Finite memory partial inverses. **(82h:93014)**
 Goodrich, Robert K. (with Gustafson, Karl E.) Weighted trigonometric approximation and inner-outer functions on higher-dimensional Euclidean spaces. **(82m:42003)**
 Gustafson, Karl E. See Goodrich, Robert K., **(82m:42003)**
 Hansen, Frank Selfadjoint means and operator monotone functions. **(82h:47020)**
 Heinz, Hans-Peter Theorems of Ascoli type involving measures of noncompactness. **(82d:54025)**
 Husain, S. A. (with Sehgal, V. M.) A principle of uniform boundedness for set valued mappings. **(82h:46016)**
 Kaplenko, E. F. (with Ponomarev, V. A.) Binary relation of a nondegenerate quadruple of subspaces. (Russian) **(82d:15018)**
 Meleško, V. I. Regularized and recurrent estimates using pseudoinverse operators. (Russian) **(82c:62045)**
 Pličko, A. M. See Valter, F. S., **(82h:46033)**
 Ponomarev, V. A. See Kaplenko, E. F., **(82d:15018)**
 Porter, William A. The state representation of polynomial maps. **(82m:93022)**
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 Rastović, Danilo On the space of linear controllable systems, operator algebras and controllability. **(82a:93012)**
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 Valter, F. S. (with Pličko, A. M.) The bounded approximation property and linear finite-dimensional regularizability. (Russian) **(82h:46033)**
 Zampieri, Giuseppe An extension of the theorem on surjections between Fréchet spaces. Some of its applications. (Italian) **(82m:35018b)**

47Bxx Single linear operators: special classes of operators

47B05 Compact operators, Riesz operators

- Baker, J. M. A note on compact operators which attain their norm. **82c:47028**
 Bourgain, Jean Sur les projections dans H^∞ et la propriété de Grothendieck. (English summary) [Projections in H^∞ and the Grothendieck property] **82i:47024**
 Carl, Bernd (with Triebel, Hans) Inequalities between eigenvalues, entropy numbers, and related quantities of compact operators in Banach spaces. **82h:47022**
 Costinescu, Olga Sur une application de la mesure de non-compactité. **82c:47025**
 Dash, A. T. Compact restrictions of several operators. **82h:47029**
 Dierolf, Susanne A note on strictly singular and strictly cosingular operators. **82c:47026**
 Jafaev, D. R. A counterexample to a uniqueness theorem for analytic operator-valued functions. (Russian. English summary) **82c:47027**
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 Parfenov, O. G. The asymptotic behavior of singular numbers of imbedding operators of some classes of analytic functions. (Russian) **82i:47028**
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 Wong, Yau Chuen A factorization theorem for Schwartz linear mappings. **82c:47024**
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secondary classifications:

- Andrews, Kevin T. Representation of compact and weakly compact operators on the space of Bochner integrable functions. **(82k:47044)**
 Arazy, Jonathan (with Friedman, Yaakov) Contractive projections in C_1 and C_∞ . **(82h:47023)**
 Babenko, V. F. (with Pičugov, S. A.) On a property of compact operators in the space of integrable functions. (Russian) **(82m:47018)**
 Bilyeu, Russell G. (with Lewis, Paul W.) Vector measures and weakly compact operators on continuous function spaces: a survey. (See **82g:28002**)
 Bourgain, Jean Dunford-Pettis operators on L^1 and the Radon-Nikodým property. **(82k:47047a)**
 A characterization of non-Dunford-Pettis operators on L^1 . **(82k:47047b)**
 Brown, R. D. Convergence of approximation methods for eigenvalues of completely continuous quadratic forms. **(82e:49063)**
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- Arazy, Jonathan (with Friedman, Yaakov) Contractive projections in C_1 and C_∞ . **82h:47023**
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- Araki, Huzihiro (with Yamagami, Shigeru) An inequality for Hilbert-Schmidt norm. **(82j:46076)**
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 Bach, Alexander Integration in Hilbert space and quantum theory. **(82j:81005)**
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- Kopačevskii, N. D. On the properties of being a basis for the eigen- and associated vectors of the selfadjoint operator pencil $I - \lambda A - \lambda^{-1}B$. (Russian) (82j:47023)
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- Lin, Pei Kee B -convexity of the space of 2-summing operators. (82k:47056)
- Linde, Werner (with Tarieladze, V. I.; Čobanjan, S. A.) Characterization of certain classes of Banach spaces by properties of Gaussian measures. (Russian. English summary) (82b:28027)
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- Niculescu, Constantin P. Absolutely continuous operators and their applications. (Romanian. English summary) (82k:47018)
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- Reinov, O. I. On some Banach ideals of operators. (82k:47074)
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- Allen, G. D. (with Legg, D. A.; Ward, Joseph D.) Hermitian liftings in Orlicz sequence spaces. (82a:47031)
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- Friedland, Shmuel Convex spectral functions. (82d:15014)
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- Apostol, C. Functional calculus and invariant subspaces. (82j:47005)
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- Schmüdgen, Konrad Perturbations of selfadjoint operators with point spectra by restrictions and selfadjoint extensions. 82h:47024
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- Berezans'kii, Ju. M. (with Samoilenko, V. G.) Selfadjointness of differential operators with a finite and infinite number of variables, and evolution equations. (Russian) (82c:47059)
- Cycon, Hans L. On the stability of selfadjointness of Schrödinger operators under positive perturbations. (82d:47048)
- Fridlander, L. F. Certain spectral properties of very weak nonselfadjoint perturbations of selfadjoint operators. (Russian) (82h:47011)
- Friedrichs, Kurt Otto ★Spectral theory of operators in Hilbert space. (82j:47001)
- Fröhlich, Jürg Unbounded, symmetric semigroups on a separable Hilbert space are essentially selfadjoint. (82c:47044)
- Furutani, Kenrō On a stability of essential spectra of Laplace operators on noncompact Riemannian manifolds. (82c:58055)
- Gesztesy, F. (with Pittner, L.) On the commutation relation $[A, B] = -iI$. (82d:81059)
- Herman, I. A Hamiltonian defined in $L^2(SO(3), \lambda)$. (82i:81031)
- Howland, James S. (with Kato, Tosio) On a theorem of Ismagilov. (82c:47012)
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- Sorjonen, Pekka Extensions of isometric and symmetric linear relations in a Krein space. (82h:47036)
- 47B35 Toeplitz operators, Wiener-Hopf operators [See also 45P05, 47G05 for other integral operators.]
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- Busby, Robert C. (with Smith, Harvey A.) Product-convolution operators and mixed-norm spaces. (82i:43003)
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- Dierolf, Peter (with Dierolf, Susanne) Some spaces are not the domain of a closed linear operator in a Banach space. (82f:47003)
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- Juhanonov, N. N. An integral equation of convolution type containing the complex-conjugate value of the unknown function, and its approximate solution. (Russian. Tajiki summary) (82e:45010)
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- Khalil, Rosdhi. Trace-class norm multipliers. (82f:47054)
- Kishimoto, Akitaka (with Robinson, Derek W.) Positivity and monotonicity properties of C_0 -semigroups. II. (82e:47052b)
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- Korotkiĭ, V. B. Characteristic properties of unbounded general integral operators. (Russian) (82i:47067)
- Koval'čik, Ĭ. M. Linear operator equations and a continual integral with respect to a Gaussian measure. (Russian. English summary) (82f:47018)
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- Peller, V. V. Analogue of J. von Neumann's inequality, isometric dilation of contractions and approximation by isometries in spaces of measurable functions. (Russian) (82i:47012)
- Pietsch, Albrecht. Eigenvalues of integral operators. I. (82i:47073b)
- Pokalo, A. K. An asymptotic formula for deviation of double multiplicative operators in a Banach space with a Cesàro approximative unit. The Bernstein inequality and Jackson's theorem. (Russian. English summary) (82j:41016)
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Dunford, Nelson. An expansion theorem. **82e:47048**

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Farwig, Reinhard (with Marschall, Erich) On the type of spectral operators and the nonspectrality of several differential operators on L^p . **82b:47037**

Gillespie, T. A. Spectral measures on spaces not containing ℓ^∞ . **82g:47026**

Kalb, Klaus Gero. The spectral measure of spectral operators of finite type. (Spanish) **82d:47043**

Kantorovitz, Shmuel. Spectrality criteria for unbounded operators with real spectrum. **82i:47049**

Lange, Ridgley. On generalization of decomposability. **82j:47054**

Liu, Guang Yu. Some properties of $D_{(m_p)}$ -type operators. (Chinese. English summary) **82m:47027**

- Liu, Long Fu On completely spectral operators. (Chinese. English summary) **82f:47047**
- Lutz, Dieter Eigenvalues and essential spectra of operators with A -spectral functions. **82k:47049**
- Marschall, Erich See Farwig, Reinhard, **82b:47037**
- Mattila, Kirsti On normal and compact operators on Banach spaces. **82b:47050**
- Nagy, B. S -spectral capacities and closed operators. **82e:47045**
- Operators with the spectral decomposition property are decomposable. **82h:47032**
- Closed S -decomposable operators. **82h:47038**
- Local spectral theory. **82h:47033**
- Rho, Jae Chul Semiweakly decomposable and semi-analytically decomposable operators. **82k:47050**
- Vernik, A. N. Integral representation of vector functions and scalar character of operators in a Banach space. (Russian) **82k:47034**
- Vu Kuok Fong On the spectral theory of scalar operators in Banach spaces. (Russian) **82c:47039**
- Wang, Sheng Wang $\mathcal{Q}_{(M_1)}$ operators and spectral operators. (Chinese summary) **82j:47055**

secondary classifications:

- Evans, Richard Embedding $C(K)$ in $B(X)$. (**82j:47020**)
- Lange, Ridgley On weak contractions. (**82e:47013**)
- Li, Bing Ren Perturbation theory for discrete spectral operators. (Chinese) (**82f:47022**)
- Nikol'skii, N. K. \star Лекции об операторе сдвига. (Russian) [Lectures on the shift operator] (**82f:47013**)
- Nukherjee, R. N. A note on normality of operators. (**82j:47027**)
- Şabac, Mihai Scalar generalized operators and irreducible representations of a Lie algebra on a complex Banach space. (**82b:17004**)
- Wu, Pei Yuan Conditions for completely nonunitary contractions to be spectral. (**82d:47014**)

47B44 Accretive operators, dissipative operators, etc.

- Bercovici, Hari Models of maximal dissipative operators. (Romanian. English summary) **82c:47040**
- Cekanov'skii, E. R. Nonselfadjoint accretive extensions of positive operators and the Friedrichs-Krein-Phillips theorems. (Russian) **82f:47048**
- Kishimoto, Akitaka Conditions for dissipative operators to be pregenerators. (See **82j:82003**)
- Kudrjašov, Ju. L. See Kužel, O. V., **82b:47039**
- Kužel, O. V. (with Kudrjašov, Ju. L.) Symmetric and selfadjoint dilations of dissipative operators. (Russian) **82b:47039**
- Kwong, Man Kam (with Zettl, A.) Remarks on best constants for norm inequalities among powers of an operator. **82b:47040**
- Showalter, R. E. Perturbation of maximal accretive operators with right angle. **82a:47035**
- Sohr, Hermann Ein neues Surjektivitätskriterium im Hilbertraum. (English summary) **82d:47051**
- Zettl, A. See Kwong, Man Kam, **82b:47040**

47B47 Commutators, derivations

- Gupta, Bal Chand (with Ramanujan, P. B.) A note on d -symmetric operators. **82k:47052**
- Rai, S. N. Hyponormal derivation on $B(H)$. **82e:47046**
- Ramanujan, P. B. See Gupta, Bal Chand, **82k:47052**
- Rosentrater, C. Ray Not every d -symmetric operator is GCR. **82b:47041**

secondary classifications:

- Arora, S. C. See Yadav, B. S., (**82f:47010**)
- Goodman, Frederick M. Non-quasi-well behaved closed \ast -derivations. (**82h:46064**)
- Hsiao, Sheng Yen (with Lin, Charles S. C.) A sufficient condition for convergence of $\lim_{n \rightarrow \infty} \omega^{-1} \int_0^{\omega} \exp(-\tau T) A \exp(\tau S) d\tau$ for unbounded operators S and T . (**82f:47064**)
- Hughes, Rhonda Jo See Kantorovitz, Shmuel, (**82j:47059**)
- Kantorovitz, Shmuel (with Hughes, Rhonda Jo) Similarity of certain singular perturbations in Banach space. (**82j:47059**)
- Lin, Charles S. C. See Hsiao, Sheng Yen, (**82f:47064**)
- Prasanna, Shanti The norm of a derivation and the Björck-Thomé-Istrăţescu theorem. (**82k:47038**)
- Yadav, B. S. (with Arora, S. C.) A generalization of Weyl's spectrum. (Serbo-Croatian summary) (**82f:47010**)

47B50 Operators on a space with an indefinite metric

- Akopjan, R. V. Regularity at infinity of a spectral function of a J -nonnegative operator. (Russian. Armenian and English summaries) **82b:47035**
- Azizov, T. Ja. (with Horošavin, S. A.) Invariant subspaces of operators acting in a space with an indefinite metric. (Russian. French summary) **82f:47047**
- Hackerik, V. A. Symmetry of the properties of a plus-operator and its conjugate. (Russian) **82b:47051**
- Horošavin, S. A. See Azizov, T. Ja., **82e:47047**
- Knowles, Ian W. On the boundary conditions characterizing J -selfadjoint extensions of J -symmetric operators. **82f:47052**
- Kovalev, P. I. Operators in Lobačevskii space. (Russian) **82k:47053**
- Krein, M. G. (with Langer, Heinz) Some propositions on analytic matrix functions related to the theory of operators in the space Π_+ . **82f:47053**
- Langer, Heinz See Krein, M. G., **82f:47053**
- Makarova, A. D. A generalized resolvent of a \mathfrak{J} -symmetric operator. (Russian) **82f:47049**
- Najman, B. Spectral properties of the operators of Klein-Gordon type. (Serbo-Croatian summary) **82b:47042**
- Perturbation theory for selfadjoint operators in Pontrjagin spaces. I. (Serbo-Croatian summary) **82e:47058**

- Ricner, V. S. Extension of dual pairs of subspaces. (Russian) **82j:47056**
- Šmul'jan, Ju. L. Transformers of linear relations in J -spaces. (Russian) **82e:47049**
- Sorjonen, Pekka Extensions of isometric and symmetric linear relations in a Krein space. **82h:47036**

secondary classifications:

- Antoine, Jean-Pierre Indefinite metric and Poincaré covariance. (**82m:46020b**)
- Dijksma, Aalt Eigenfunction expansions for a class of J -selfadjoint ordinary differential operators with boundary conditions containing the eigenvalue parameter. (**82h:47045**)
- Flösser, Hans O. Sequences of positive contractions on AM-spaces. (**82h:41043**)
- Xia, Dao Xing On the scattering matrix with indefinite metric. (**82f:47012**)

47B55 Operators on ordered spaces

- Aliprantis, Charalambos D. (with Burkinshaw, Owen) On weakly compact operators on Banach lattices. **82j:47057**
- Alonso y Coria, Alberto (with Canavati, José A.) Some spectral properties of positive operators on a Banach space. **82k:47054**
- Azorkin, V. I. (with Bahtin, I. A.) Normality and nonflatness of a pair of wedges of linear operators. (Russian) **82d:47044**
- Bahtin, I. A. See Azorkin, V. I., **82d:47044**
- Bernau, S. J. Orthomorphisms of Archimedean vector lattices. **82b:47043**
- Burkinshaw, Owen See Aliprantis, Charalambos D., **82j:47057**
- Canavati, José A. See Alonso y Coria, Alberto, **82k:47054**
- Cristescu, Romulus Remarks on some operator equations. (Romanian. French summary) **82d:47045**
- van Eldik, Peter See Grobler, Jacobus J., **82c:47041**
- Filin, V. A. Linear operators that are quasipositive with respect to a wedge. (Russian. Tajiki summary) **82h:47044**
- Foguel, Shaul R. The Hopf decomposition of a Riesz space. **82m:47028**
- Grobler, Jacobus J. A short proof of the Ando-Krieger theorem. **82h:47045**
- (with van Eldik, Peter) A characterization of the band of kernel operators. **82c:47041**
- Karabano, A. P. Linear operators and functionals in lattice-normed spaces. (Russian) **82b:47046**
- Krasnosel'skii, M. A. (with Lifšic, E. A.; Pokorniy, Ju. V.; Stecenko, V. Ja.) Positive invertibility of linear operators. (Russian) **82f:47050**
- Kulakova, V. G. Positive projectors in symmetric KB-spaces. (Russian) **82b:47054**
- Lifšic, E. A. See Krasnosel'skii, M. A.; et al., **82f:47050**
- Lipecti, Zbigniew (with Plachky, Detlef; Thomsen, W.) Extensions of positive operators and extreme points. I. **82k:47055**
- Extensions of positive operators and extreme points. II. **82k:47056**
- Meyer, Mathieu Les homomorphismes d'espaces vectoriels réticulés complexes. (English summary) **82f:47051**
- Partington, J. R. Hadamard-Landau inequalities in uniformly convex spaces. **82h:47037**
- Plachky, Detlef See Lipecti, Zbigniew; et al., **82k:47055**
- Pokorniy, Ju. V. See Krasnosel'skii, M. A.; et al., **82f:47050**
- Scheffold, Egon Über die Konvergenz positiver Operatoren mit Werten in atomaren Banachverbänden mit ordnungsstetiger Norm. (English summary) **82m:47029**
- Stecenko, V. Ja. See Krasnosel'skii, M. A.; et al., **82f:47050**
- Šul'ga, D. D. Continuity of ϕ -bounded mappings. (Russian) **82b:47047**
- Synatschke, J. Über einige verbandstheoretische Eigenschaften der Multiplikation von Operatoren in Vektorverbänden. **82b:47048**
- Thomsen, W. See Lipecti, Zbigniew; et al., **82k:47055**
- Tucker, C. T. Positive operators on spaces of Baire functions. **82f:47055**
- Wickstead, Anthony W. Relatively central operators on Archimedean vector lattices. I. **82g:47027**

secondary classifications:

- Abramović, Ju. A. Some new characterizations of AM-spaces. (Russian) (**82c:46025**)
- Akilov, G. P. (with Kutateladze, S. S.) Some problems of the theory of ordered vector spaces. (Russian) (**82d:46013**)
- Albrecht, Ernst (with Neumann, Michael) Automatische Stetigkeitseigenschaften einiger Klassen linearer Operatoren. (**82f:47052**)
- Asimova, D. M. Two-sided approximations to a solution of linear operator equations and an estimate of error. (Russian. Tajiki summary) (**82j:47017**)
- Birkhoff, Garrett \star Lattice theory. (**82a:06001**)
- Derndinger, Roland Über das Spektrum positiver Generatoren. (**82b:47052**)
- Donner, Klaus Extension of positive linear operators in L^p -spaces. (**82d:47040**)
- Duhoux, Michel See Ng, Kung Fu, (**82g:46018**)
- Ioŭšihes, A. P. See Voropanov, S. A., (**82f:65065**)
- Kajiser, Sten Local operators on Banach lattices. (**82a:46025**)
- Kutateladze, S. S. Modules allowing convex analysis. (Russian) (**82d:46015**)
- See also Akilov, G. P., (**82d:46013**)
- Meyer-Nieberg, Peter On permanence properties of sublinear operators. (**82k:47084**)
- Milaszewicz, J. P. On fixed point linear equations. (**82k:65035**)
- Neumann, Michael See Albrecht, Ernst, (**82f:47052**)
- Ng, Kung Fu (with Duhoux, Michel) Directedness in ordered normed spaces and operators. (**82g:46018**)
- Nguyễn Quý Hỷ On the kernel representation of some positive linear operators. (**82m:47023**)
- Szulga, Jerzy On operator characterization of AM- and AL-spaces. (**82m:46019**)
- Takeo, Fukiio Reduction of a positive operator in a separable simplex space. (**82c:47008**)
- Trottenberg, Ulrich (with Winter, Gerd) On faces and W -irreducible operators in finite-dimensional linear spaces. (**82e:15016**)
- Voropanov, S. A. (with Ioŭšihes, A. P.) A method for accelerating the convergence of monotone iteration processes. (Russian. Tajiki summary) (**82f:65065**)
- Vuza, Dan Sur les espaces vectoriels réticulés complexes. (**82c:46011**)
- Winter, Gerd See Trottenberg, Ulrich, (**82e:15016**)

47B99 None of the above, but in this section

- Albrecht, Ernst (with Neumann, Michael) Automatische Stetigkeitseigenschaften einiger Klassen linearer Operatoren. **82i:47052**
- Edgar, Gerald A. Asplund operators and a.e. convergence. **82i:47053**
- Feintuch, Avraham State space theory for resolution space operators. **82a:47036**
(with Sacks, Richard) Extended spaces and the resolution topology. **82b:47049**
- Furuta, Takayuki Essentially convexoid operators. **82j:47058**
- Neumann, Michael See Albrecht, Ernst, **82i:47052**
- Pethe, P. V. (with Thakare, N. K.) Convex sums of orthogonal projections on a Banach space. **82i:47056**
- Sacks, Richard See Feintuch, Avraham, **82b:47049**
- Thakare, N. K. See Pethe, P. V., **82i:47056**
- Valușescu, Ilie On the maximal outer function of a semispectral measure. **82b:47050**
- Zaslavskii, A. Ja. Sublinear operators and semigroups. (Russian) **82i:47057**

secondary classifications:

- Arai, Asao Selfadjointness and spectrum of Hamiltonians in nonrelativistic quantum electrodynamics. **82g:81013**
- Balas, Mark J. Nonlinear state estimation and feedback control of nonlinear and bilinear distributed parameter systems. **(82g:93035)**
- Behncke, Horst The Dirac equation with an anomalous magnetic moment. **(82g:81014)**
- Behrends, Ehrhard (with Evans, Richard) Multiplicity theory for Boolean algebras of L^p -projections. **(82d:46019)**
- Bertuzzi, Alessandro (with Bruni, C.; Gandolfi, Alberto; Germani, Alfredo) Volterra series expansion for bilinear systems in a nonlinear feedback loop. **(82g:93025)**
- Bruni, C. See Bertuzzi, Alessandro; et al., **(82g:93025)**
- Bulut, E. Continuous operators on paranormed spaces and matrix transformations of strong Cesàro summable sequences. (Turkish summary) **(82i:46009)**
- Coifman, R. R. (with Rochberg, R. H.; Taibleson, Mitchell H.; Weiss, Guido) Introduction. **(82g:32010)**
- Corrigan, E. (with Goddard, P.; Osborn, Hugh; Templeton, S.) Zeta-function regularization and multi-instanton determinants. **(82g:81077)**
- Daubichies, Ingrid On the distributions corresponding to bounded operators in the Weyl quantization. **(82d:81025)**
- Dudușava, R. V. Solution of a convolution equation on a quadrant. (Russian) **(82a:45009)**
- Eckmann, Jean-Pierre (with Epstein, H.) Time-ordered products and Schwinger functions. **(82e:81031)**
- Epstein, H. See Eckmann, Jean-Pierre, **(82e:81031)**
- Evans, Richard See Behrends, Ehrhard, **(82d:46019)**
- Flalkow, Lawrence A. Essential spectra of elementary operators. **(82i:47006)**
- Gandolfi, Alberto See Bertuzzi, Alessandro; et al., **(82g:93025)**
- Germani, Alfredo See Bertuzzi, Alessandro; et al., **(82g:93025)**
- Goddard, P. See Corrigan, E.; et al., **(82g:81077)**
- Iľmuskin, G. M. Solutions of an operator power problem of moments. (Russian) **(82d:47031)**
- Jørgensen, Palle E. T. A uniqueness theorem for the Heisenberg-Weyl commutation relations with nonselfadjoint position operator. **(82g:81033)**
- Kozen, Dexter Semantics of probabilistic programs. **(82i:68011)**
- Kramer, Edvard Locally convex topological vector spaces with Hilbertian seminorms. **(82i:46008a)**
- Linear operators in H -locally convex spaces. **(82i:46008b)**
- Li, Hao Best positive approximations of operators. (Chinese) **(82i:47024)**
- Ochs, Wilhelm Concepts of convergence for a quantum law of large numbers. **(82g:81020)**
- Osborn, Hugh See Corrigan, E.; et al., **(82g:81077)**
- Plehański, Jerzy F. (with Seligman, Thomas H.) Partial isometries and quotient structures in Hilbert spaces. **(82j:47060)**
- Reinov, O. I. RN-sets in Banach spaces. (Russian) **(82d:46031)**
- Rochberg, R. H. See Coifman, R. R.; et al., **(82g:32010)**
- Seligman, Thomas H. See Plehański, Jerzy F., **(82j:47060)**
- Sokolovskii, V. B. New relations of some problems for equations containing a Lévy-Laplace operator with problems of mathematical physics. (Russian) **(82i:35096)**
- Soler, V. N. Letter to the editors: "Absolutely regular trajectories in Hilbert space" [Zap. Načn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) 22 (1971), 139–160; MR 46 #9721]. (Russian) **(82i:46056)**
- Taibleson, Mitchell H. See Coifman, R. R.; et al., **(82g:32010)**
- Tapero, T. B. Common perpendiculars of pairs of planes in infinite-dimensional non-Euclidean spaces. (Russian) **(82e:51029)**
- Templeton, S. See Corrigan, E.; et al., **(82g:81077)**
- Vernik, A. N. A spectral representation of operators acting in a Banach space. (Russian) **(82i:47009)**
- Wehrli, A. Three theorems about entropy and convergence of density matrices. **(82e:82006)**
- Weiss, Guido See Coifman, R. R.; et al., **(82g:32010)**
- Representation theorems for Hardy spaces See Coifman, R. R.; et al., **(82g:32010)**

47Cxx Single linear operators as elements of algebraic systems

47C05 Operators in algebras

Feintuch, Avraham Strong causality conditions and causal invertibility. **82e:47050**

secondary classifications:

- De Santis, Romano M. (with Feintuch, Avraham) Causality theory and multiplicative transformers. **(82e:93090)**
- Ėšdaviļovs, Ē. A generalized operator equation in a Banach algebra. (Russian) **(82i:47017)**

- Feintuch, Avraham See De Santis, Romano M., **(82e:93090)**
- Hopenwasser, Alan Compact operators in the radical of a reflexive operator algebra. **(82b:47056)**
- Spitkovskii, I. M. See Vasilevskii, N. L., **(82i:47063)**
- Truhil'o, R. See Vasilevskii, N. L., **(82b:47015)**
- Vasilevskii, N. L. (with Truhil'o, R.) On the theory of φ -operators in matrix algebras of operators. (Russian) **(82i:47015)**
(with Spitkovskii, I. M.) On the algebra generated by two projectors. (Russian. English summary) **(82i:47063)**
- Vu Kook Fong On the spectral theory of scalar operators in Banach spaces. (Russian) **(82i:47039)**
- Wu, Pei Yuan C_{11} contractions are reflexive. II. **(82j:47008)**

47C10 Operators in *-algebras

47C15 Operators in C^* - or von Neumann algebras

secondary classifications:

- Ben-Jacob, Marion Glazerman Hyponormal operators compact relative to a W^* -algebra. **(82c:47034)**
- Douglas, Ronald G. $\star C^*$ -algebra extensions and K -homology. **(82c:46082)**
- O'Donovan, D. P. Unitary equivalence of essentially normal operators modulo the compacts. **(82i:47036)**
- Popa, Sorin On the Russo-Dye theorem. **(82j:46074)**
- Vu Kook Fong Theorems of von Neumann type for some classes of operators. (Russian. English summary) **(82i:47046)**

47C99 None of the above, but in this section

47Dxx Algebraic systems of linear operators [See also 46Lxx.]

47D05 Semigroups of operators {For nonlinear operators, see 47H20; see also 20M20.}

- Alberti, Peter M. Fortsetzungssätze für Markovsche Halbgruppen stochastischer und spurhaltender linearer Abbildungen über Matrixalgebren. **82a:47037**
- Baillon, Jean-Bernard Caractère borné de certains générateurs de semi-groupes linéaires dans les espaces de Banach. (English summary) **82a:47038**
- Bakae, N. Ju. Operator semigroups and differential equations in a Banach space. (Russian) **82i:47058**
- Berkson, Earl One-parameter semigroups of isometries into H^p . **82e:47051**
- Bratteli, Ola (with Kishimoto, Akitaka; Robinson, Derek W.) Positivity and monotonicity properties of C_0 -semigroups. I. **82e:47052a**
- Braunss, Günter On a class of Lyapunov operators. **82i:47059**
- Brodskii, A. L. A family of operators connected with generalized shift. (Russian) **82i:47051**
- Butzer, P. L. (with Hahn, L.) A probabilistic approach to representation formulae for semigroups of operators with rates of convergence. **82g:47028**
- Ciorănescu, Ioana (with Zsidó, László) ω -ultradistributions in the abstract Cauchy problem. **82c:47042**
- On distribution semigroups of subnormal operators. **82b:47038**
- Davies, Edward Brian \star One-parameter semigroups. **82i:47060**
- Delfour, M. C. The largest class of hereditary systems defining a C_0 semigroup on the product space. **82c:47043**
- Derndinger, Roland Über das Spektrum positiver Generatoren. **82b:47052**
- Freedman, M. A. A faithful Hille-Yosida theorem for finite-dimensional evolutions. **82i:47061**
- Fröhlich, Jürg Unbounded, symmetric semigroups on a separable Hilbert space are essentially selfadjoint. **82c:47044**
- Gill, Tepper L. Time-ordered operators. I. Foundations for an alternative view of reality. **82i:47057**
- Goldstein, Jerome A. Some developments in semigroups of operators since Hille-Phillips. **82i:47062**
- Greiner, Günther (with Voigt, Jürgen; Wolff, Manfred) On the spectral bound of the generator of semigroups of positive operators. **82h:47039**
- Zur Perron-Frobenius-Theorie stark stetiger Halbgruppen. **82i:47063**
- Hahn, L. See Butzer, P. L., **82g:47028**
- (Haneda, H.) See Tanabe, Hiroki, **82g:47032**
- Hsiao, Sheng Yen (with Lin, Charles S. C.) A sufficient condition for convergence of $\lim_{t \rightarrow \infty} t^{-1} \int_0^t \exp(-\tau T) A \exp(\tau S) d\tau$ for unbounded operators S and T . **82i:47064**
- Some exponential formulas for m -parameter semigroups. **82i:47065**
- Hughes, Rhonda Jo See Kantorovitz, Shmuel, **82j:47059**
- Ichinose, Takashi A product formula and its application to the Schrödinger equation. **82i:47039**
- See also Koyama, Tetsuya, **82i:47066**
- Jørgensen, Palle E. T. (with Muhly, Paul S.) Selfadjoint extensions satisfying the Weyl operator commutation relations. **82i:47058**
- Kantorovitz, Shmuel (with Hughes, Rhonda Jo) Similarity of certain singular perturbations in Banach space. **82j:47059**
- Kishimoto, Akitaka (with Robinson, Derek W.) Positivity and monotonicity properties of C_0 -semigroups. II. **82e:47052b**
(with Robinson, Derek W.) Subordinate semigroups and order properties. **82i:47059**
- See also Bratteli, Ola; et al., **82e:47052a**
- Köhnen, Walter Einige Sättigungssätze für n -parametrische Halbgruppen von Operatoren. **82g:47029**
- Koyama, Tetsuya (with Ichinose, Takashi) On the Trotter product formula. **82i:47066**
- Lapidus, Michel Perturbation d'un semi-groupe par un groupe unitaire. (English summary) **82d:47046**

- Lin, Charles S. C. See Hsiao, Sheng Yen, 82c:47064
- Mahmudov, H. Some classes of subgroups of linear operators in locally convex spaces. (Russian) 82c:47045
- Masani, P. Multiplicative partial integration and the Trotter product formula. 82m:47030a
Erratum: "Multiplicative partial integration and the Trotter product formula". 82m:47030b
- (Mugibayashi, N.) See Tanabe, Hiroki, 82g:47032
- Muhly, Paul S. See Jørgensen, Palle E. T., 82c:47058
- Mustafaev, L. G. Semigroups of linear continuous transformations. I, II. (Russian) 82c:47046
- Pap, Endre (with Pilipović, Stevan) A sequential theory of some semigroups in special spaces of generalized functions. 82i:47067
- Paquet, Luc Semi-groupes holomorphes en norme du sup. 82a:47040
Semi-groupes généralisés et équations d'évolution. 82c:47068
- Pilipović, Stevan See Pap, Endre, 82i:47067
- Piskarev, S. I. Approximation of holomorphic semigroups. (Russian. English summary) 82c:47047
- Plebański, Jerzy F. (with Seligman, Thomas H.) Partial isometries and quotient structures in Hilbert spaces. 82j:47060
- Rēznikov, S. I. Limit theorems for singularly perturbed evolution operators. (Russian) 82g:47030
- Robinson, Derek W. See Bratteli, Ola; et al., 82c:47052a; Kishimoto, Akitaka, 82c:47052b and 82c:47059
- Seligman, Thomas H. See Plebański, Jerzy F., 82j:47060
- Takano, Katsuo One-parameter semigroups with infinitesimal generators of fractional powers of the Laplacian on weighted L^p -spaces. 82g:47031
- Tanabe, Hiroki ★ Equations of evolution. 82g:47032
- Turbine, A. F. Limit theorems and asymptotic expansions for singularly perturbed semigroups of operators. (Russian) 82g:47033
- Voigt, Jürgen A perturbation theorem for the essential spectral radius of strongly continuous semigroups. 82h:47053
See also Greiner, Günther; et al., 82h:47039
- Wolff, Manfred See Greiner, Günther; et al., 82h:47039
- Zsidó, László See Ciorănescu, Ioana, 82c:47042

secondary classifications:

- Angelov, V. G. (with Bainov, D. D.) Existence and uniqueness of the solution of the generalized Cauchy problem for some nonlinear integro-differential equations in Banach space. (Russian) (82d:45014)
- Bainov, D. D. See Angelov, V. G., (82d:45014)
- Balabane, Mikhael (with Emamirad, Hassan Ali) Systèmes pseudo différentiels paraboliques dans $L^p(\mathbb{R}^n)$. (English summary) (82d:35107)
Décroissance des solutions d'équations du type de Schrödinger. Application à leur régularité dans $L^p(\mathbb{R}^n)$. (English summary) (82c:35031)
- Bartosiewicz, Zbigniew Density of images of semigroup operators for linear neutral functional differential equations. (82d:34105)
- Bellini-Morante, Aldo Particle transport in a slab bounded by capturing and reflecting planes. (Italian summary) (82d:82091)
- Bercović, Hari Models of maximal dissipative operators. (Romanian. English summary) (82c:47040)
- Bertuzzi, Alessandro (with Gandolfi, Alberto; Germani, Alfredo) Causal polynomial approximation for input-output maps on Hilbert spaces. (82j:93010)
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- Klimov, V. S. Nontrivial solutions of equations with potential operators. (Russian) 82g:47038
- Mamedov, G. K. On the approximate solution of nonlinear operator equations. (Russian. Azerbaijani and English summaries) 82k:47070
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- Ashabov, S. N. Investigation of nonlinear singular integral equations by the method of monotone operators. (Russian) (82b:45013)
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- Šćepanović, Radoje** The method of variations and fixed points. (Serbo-Croatian. Russian summary) **82d:47062**
- Schöneberg, R.** See Baillon, Jean-Bernard. **82c:47068**
- Singh, S. L.** A note on the convergence of sequence of iterates. II. **82d:47063**
 On a fixed point theorem of Goebel, Kirk and Shimi. **82d:47064**
- Sternfeld, Y.** See Haydon, R.; et al. **82c:47070**
- Sul'man, V. S.** Fixed points of linear-fractional transformations. (Russian) **82d:47065**
- Tarafdar, E.** See Husain, Taqdir. **82m:47039**
- Torrejón, Ricardo** On the common fixed points of a commutative family of nonlinear mappings. **82f:47071**
- Williams, Lynn R.** See Leggett, Richard W. **82a:47055**
- secondary classifications:
- Anichini, Giuseppe** Addendum and corrigendum: "Nonlinear problems for systems of differential equations" [Nonlinear Anal. I (1976/77), no. 6, 691-699; MR 58 #28782]. **(82a:34014)**
- Appel, Ju.** (with Zabrejko, P. P.) Condensing operators in the theory of implicit functions. (Russian) **(82j:58012)**
- Bahtin, I. A.** (with Tokareva, T. V.) Existence of positive eigenvectors of a class of concave discontinuous noncompact operators. (Russian) **(82b:47069)**
- Baillon, Jean-Bernard** Nonlinear ergodic theory in Banach spaces. **(82k:47071)**
- Banás, Józef** (with Goebel, Kazimierz) ★ Measures of noncompactness in Banach spaces. **(82f:47066)**
- Bharucha-Reid, A. T.** See Chandrasekharan, P. S. **(82b:60075)**
- Chandrasekharan, P. S.** (with Bharucha-Reid, A. T.) Approximate solution of fixed point equations for random operators. **(82b:60075)**
- Chang, Shih Sen** Random fixed point theorem in probabilistic analysis. **(82c:60114)**
- Chung, Kun Jen** Nonlinear contractions in abstract spaces. **(82j:54092)**
- Czerwik, Stefan** ★ Fixed point theorems and special solutions of functional equations. **(82b:54072)**
- Dang Dinh Ang** (with Dinh Ngoc Thanh) A probabilistic analogue of the Bohnenblust-Karlin fixed point theorem. **(82m:60075)**
- Di Lena, G.** A fixed-point theorem intended for the calculation of real zeros of a function. (Italian. English summary) **(82f:26004)**
- Dinh Ngoc Thanh** See Dang Dinh Ang. **(82m:60075)**
- Bồ Hồng Tân** On the contraction principle. **(82c:54051)**
- Goebel, Kazimierz** (with Sekowski, T.; Stachura, A.) Uniform convexity of the hyperbolic metric and fixed points of holomorphic mappings in the Hilbert ball. **(82f:32039)**
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- Grecksch, Wilfried** (with Schild, Wilma) Über eine realisierungsweise partielle Differentialgleichung. **(82j:60111)**
- Gwinn, J.** On fixed points and variational inequalities—a circular tour. **(82c:49018)**
- Hadžić, Olga** (with Stojaković, Mla) On the existence of a solution of the system $x = H(x, y)$, $y = K(x, y)$ in random normed spaces. (Serbo-Croatian summary) **(82b:47078)**
- Hahn, Siegfried** Ein Homotopieerweiterungssatz für konzentrierende mengenwertige Abbildungen in lokalkonvexen topologischen Vektorräumen. (English summary) **(82a:54085)**
- Heinrich, Jörg** Eine Übertragung des Fixpunktsatzes von Schauder auf metrische Räume. [A transfer of Schauder's fixed-point theorem to metric spaces] **(82b:54070)**
- Hikida, Masato** A note on contractions in ranked spaces. **(82g:54069)**
- Hirano, Norimichi** A proof of the mean ergodic theorem for nonexpansive mappings in Banach space. **(82c:47067)**
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- Ichishi, Tatsuro** On the Knaster-Kuratowski-Mazurkiewicz-Shapley theorem. **(82j:55002)**
- Isac, George** ★ Cônes localement bornés et cônes complètement réguliers. (French) [Locally bounded cones and completely regular cones] **(82j:47069)**
- Joshi, Mohan** Nonlinear random equations with P -compact operators in Banach spaces. **(82c:60115)**
- Kannan, Rangachary** Random correspondences and nonlinear equations. **(82b:60125)**
- Kirk, W. A.** (with Torrejón, Ricardo) Asymptotically nonexpansive semigroups in Banach spaces. **(82a:47062)**
- Lim, Teck Cheong** Asymptotic centers and nonexpansive mappings in conjugate Banach spaces. **(82b:47052)**
 The center of a convex set. **(82c:46027)**
- Massatt, Paul** Some properties of condensing maps. **(82j:54099)**
- Melencov, A. A.** (with Rudakov, S. A.) Pseudoconvergence and summability of iterations of nonlinear operators. (Russian) **(82f:47067)**
- Mönch, Harald** Boundary value problems for nonlinear ordinary differential equations of second order in Banach spaces. **(82c:34075)**
- Mullin, Albert A.** Applications of functional analysis to Diophantine optimization-theory. **(82k:90085)**
- Noor, M. Aslam** A constructive proof of the Lax-Milgram lemma. **(82c:47023)**
- Park, Sehie** A general principle of fixed point iterations on compact intervals. **(82d:54054)**
- Pascali, Eduardo** A criterion of existence for functional equation systems. (Italian) **(82d:47083)**
- Reich, Simeon** Iterative methods for accretive sets. **(82c:47065)**
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- Rus, Ioan A.** Maps with q -contractive iterates. (Romanian. English summary) **(82k:54078)**
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- Shih, Mou Hsiang** Location of the zeros of continuously differentiable maps. **(82b:55003)**
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- Takahashi, Wataru** A nonlinear ergodic theorem for an amenable semigroup of nonexpansive mappings in a Hilbert space. **(82f:47079)**
 (with Hirano, Norimichi) Recent topics in nonlinear functional analysis. On nonlinear ergodic theorems. (Japanese) **(82m:47037)**
- Tasković, Milan R.** Some results in the fixed point theory. II. **(82f:54082)**
- Tokareva, T. V.** See Bahtin, I. A. **(82b:47069)**
- Torrejón, Ricardo** See Kirk, W. A. **(82a:47062)**
- Voss, Heinrich** Positive solutions of superlinear boundary value problems. **(82d:34025)**
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- Yuasa, Toshio** Differential equations in a locally convex space via the measure of nonprecompactness. **(82m:34067)**
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- Gaudet, R.** See Isac, George. **82c:47076** and **82j:47079**
- Isac, George** (with Gaudet, R.) Sur l'existence des valeurs propres positives pour des opérateurs non-linéaires dans les espaces localement convexes. **82c:47076**
 (with Gaudet, R.) Sur l'existence des valeurs propres positives pour des opérateurs non-linéaires dans les espaces localement convexes. **82j:47079**
- Klimov, V. S.** Eigenvectors of potential operators in complementary systems. (Russian) **82c:47073**
- Mahmudov, A. P.** Completeness of systems of eigenelements of some quasilinear operator

equations. (Russian) **82m:47040**

Pyhteev, G. N. A case of convergence of the iteration method and its application in the theory of jets. (Russian) **82c:47074**

Tokareva, T. V. Structure of the positive spectrum of a class of concave discontinuous noncompact operators. (Russian) **82b:47076**

secondary classifications:

Alexander, J. C. (with Antman, Stuart S.) Global and local behavior of bifurcating multidimensional continua of solutions for multiparameter nonlinear eigenvalue problems. (82k:58030)

Antman, Stuart S. See Alexander, J. C., (82k:58030)

Bahtin, I. A. (with Cyong Suan Dyk Ha) Convergence of the method of successive approximations in the theory of nonlinear equations with concave operators. (Russian) (82b:47070)

Bazley, Norman W. (with Küpper, T.) Bifurcation diagrams and periodic solutions to nonlinear equations. (German summary) (82m:58016)

Binding, Paul On the use of degree theory for nonlinear multiparameter eigenvalue problems. (82a:47021)

Bongers, Achim Über ein Rayleigh-Ritz-Verfahren zur Bestimmung kritischer Werte. (English summary) (82c:58011)

Cyong Suan Dyk Ha See Bahtin, I. A., (82b:47070)

Hess, Peter On multiple positive solutions of nonlinear elliptic eigenvalue problems. (82j:35062)

Küpper, T. See Bazley, Norman W., (82m:58016)

Kuzen'kin, S. N. Spectral properties of point-set mappings. (Russian) (82k:46019)

Shibutani, Norimasa Nonlinear eigenvalue problems associated with subdifferentials. (82j:58030)

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Ahmedov, Saidamir Ahmedović Application of a nonlinear equation in L_p to the study of some nonlinear Beltrami equations. I. (Russian) **82b:47058a**

Application of a nonlinear equation in L_p to the study of some nonlinear Beltrami equations. II. (Russian) **82b:47058b**

Amann, Herbert (with Zehnder, Eduard) Nontrivial solutions for a class of nonresonance problems and applications to nonlinear differential equations. **82b:47077**

Angelov, V. G. (with Bainov, D. D.) Existence and uniqueness of the solution of nonlinear functional equations in L^p space. (Russian) **82c:47075**

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Bardaro, Carlo (with Pucci, Patrizia) An existence theorem for generalized differential equations in Banach spaces. (Italian) **82f:47072**

Bates, Peter W. Solutions of nonlinear elliptic systems with meshed spectra. **82a:47056**

Bebernes, Jerry (with Martelli, Mario) On the structure of the solution set for periodic boundary value problems. **82d:47066**

Becker, Ronald I. Existence of solutions of Hammerstein equations of compact type. **82c:47076**

Beirão da Veiga, Hugo On bifurcation and asymptotic bifurcation for nondifferentiable potential operators and for systems of the Hammerstein type. **82j:47080**

Cesari, Lamberto (with Engl, Heinz W.) Existence and uniqueness of solutions for nonlinear alternative problems in a Banach space. **82k:47078**

Coron, Jean-Michel Résolution de l'équation $Au + Bu = f$ où A est linéaire et B dérive d'un potentiel convexe. (English summary) **82e:47077**

Díaz Díaz, Jesús Ildefonso Vanishing of solutions for certain nonlinear parabolic problems. (Spanish. English summary) **82c:47093**

Dolezal, Václav An approximation theorem for a Hammerstein-type equation and applications. **82j:47081**

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Engl, Heinz W. See Cesari, Lamberto, **82k:47078**

Furi, Massimo (with Pera, Maria Patrizia) On the existence of an unbounded connected set of solutions for nonlinear equations in Banach spaces. (Italian summary) **82j:47082**

(with Pera, Maria Patrizia) An elementary approach to boundary value problems at resonance. **82a:47058**

Gaeta, Giuseppa L - e -quasibounded operators and coincidence theorems. (Italian. English summary) **82m:47041**

Groze, Sever The principle of the majorant in solving operator equations which depend on parameters. **82d:47067**

Gupta, Chaitan P. On functional equations of Fredholm and Hammerstein type with applications to existence of periodic solutions of certain ordinary differential equations. **82c:47078**

Hadžić, Olga (with Stojaković, Mila) On the existence of a solution of the system $x = H(x, y)$, $y = K(x, y)$ in random normed spaces. (Serbo-Croatian summary) **82b:47078**

Hetzer, Georg A continuation theorem and the variational solvability of quasilinear elliptic boundary value problems at resonance. **82c:47079**

Hludnev, A. M. A boundary value problem for a system of equations with monotone operator. (Russian) **82c:47077**

Hofer, Helmut A multiplicity result for a class of nonlinear problems with application to a nonlinear wave equation. **82c:47080**

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de Korvin, A. (with Roberts, Charles E., Jr.) Convergence theorems for some scalar valued integrals when the measure is Nemytskii. **82f:47073**

Kozjakin, V. S. (with Krasnosel'skii, M. A.) A method of parameter functionalization in the problem of bifurcation points. (Russian) **82b:47079**

Krasnosel'skii, M. A. See Kozjakin, V. S., **82b:47079**

Lange, Charles G. Branching from closely spaced eigenvalues with application to a model biochemical reaction. **82k:47079**

Lev, Avshalom Branching of solutions of equations involving mappings possessing null

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Loginov, B. V. The stability of the solutions of a problem on bifurcation points. (Russian) **82d:47068**

Martelli, Mario See Bebernes, Jerry, **82d:47066**

Matzeu, Michele See Donati, Flavio, **82a:47057**

Mawhin, Jean (with Willem, Michel) Range of nonlinear perturbations of linear operators with an infinite-dimensional kernel. **82e:47081**

Semilinear equations of gradient type in Hilbert spaces and applications to differential equations. **82f:47095**

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Milojević, P. S. Approximation-solvability of some nonlinear operator equations with applications. **82d:47069**

Morosanu, Gheorghe Regularity of solutions of variational inequalities in Hilbert spaces. **82c:47059**

Musielak, Julian See Jędrzyka, T. M., **82f:47094**

Nagle, R. Kent Monotonicity and alternative methods. **82c:47082**

Pascali, Dan On variational methods for Hammerstein equations. **82a:47060**

Pascali, Eduardo A criterion of existence for functional equation systems. (Italian) **82c:47083**

Pera, Maria Patrizia See Furi, Massimo, **82a:47058** and **82j:47082**

Petryshyn, W. V. On the solvability of $x \in Tx + \lambda Fx$ in quasiconvex cones with T and F k -set-contractive. **82f:47074**

Pucci, Patrizia See Bardaro, Carlo, **82f:47072**

Reiss, Edward L. A modified two-time method for the dynamic transitions of bifurcation. **82c:47084**

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Roberts, Charles E., Jr. See de Korvin, A., **82f:47073**

Schechter, Eric Evolution generated by continuous dissipative plus compact operators. **82b:47060**

Schumacher, Konrad Remarks on semilinear partial functional-differential equations with infinite delay. **82b:47061**

Shaw, Howard (with McKenna, P. J.) On the structure of the set of solutions to some nonlinear boundary-value problems. **82d:47070**

Stojaković, Mila See Hadžić, Olga, **82b:47078**

Straskraba, I. See Vejvoda, O., **82g:47043**

Strauss, Walter A. Everywhere defined wave operators. **82c:47078**

Vejvoda, O. (with Straskraba, I.) Perturbed nonlinear abstract equations. **82g:47043**

Willem, Michel Variational methods and almost solvability of semilinear equations. **82b:47062**

Topology and semilinear equations at resonance in Hilbert space. **82j:47083**

Density of the range of potential operators. **82k:47080**

See also Mawhin, Jean, **82c:47081**

Zehnder, Eduard See Amann, Herbert, **82b:47077**

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Altman, Mieczysław Monotone e -mappings. (Russian summary) (82b:47067)

Amann, Herbert Multiplicity results for nonlinear elliptic boundary value problems. (82b:35060)

Funktionalanalysis und nichtlineare Differentialgleichungen. (82d:58020)

Ambrosetti, Antonio Global inversion theorems and applications to nonlinear problems. (82c:35037)

Antonovskii, E. Ja. Existence and properties of the degree of almost strongly Fredholm mappings. (Russian) (82f:58008)

Arker, H. Zur asymptotischen Verzweigung in einfachen Eigenwerten mit invertierbarer Eigenfunktion. (82j:58034)

Aron, M. On the continuous dependence of solutions to nonlinear problems in Hilbert space. (82b:34082)

Ashabov, S. N. On the applicability of the method of monotone operators to nonlinear singular equations in $L_2(-\infty, \infty)$. (Russian. Azerbaijani and English summaries) (82c:45013)

Barbu, Viorel (with Da Prato, G.) Global existence for a nonlinear operator equation arising in synthesis of optimal control. (82a:49011)

A semigroup approach to an infinite delay equation in Hilbert space. (82c:47098)

Bellini-Morante, Aldo A problem of evolution arising from particle transport with quadratic nonlinearities. (82a:82050)

Berestycki, Henri (with de Figueiredo, Djairo Guedes) Double resonance in semilinear elliptic problems. (82f:35078)

Biróli, Marco Almost periodicity and asymptotic behavior for the solutions of a nonlinear wave equation. (See **82d:34003**)

Bondarev, B. V. An iterative method for solving some equations with random

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Bottaro Aruffo, Ada An existence and uniqueness theorem for a nonlinear differential equation. (Italian) (82c:34073)

Boudourides, Moses A. On bounded solutions of nonlinear ordinary differential equations. (82j:34066)

Brézis, Haim Nonlinear vibrating strings and the range of the sum of nonlinear operators. (82b:35065)

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Browder, Felix E. See Brézis, Haim, (82c:35047)

Cesari, Lamberto (with Kannan, Rangachary) Existence of solutions of nonlinear hyperbolic equations. (82d:35065a)

Cesarina Salvatori, M. See Mattioli, Nuvoletta, (82k:78001)

Chow, Shui Nee (with Kurtz, J. C.) Singular nonlinear equations on an unbounded interval. (82f:58027)

Clément, Ph. (with Nohel, John A.) Asymptotic behavior of solutions of nonlinear Volterra equations with completely positive kernels. (82g:45022)

Corduneanu, Adrian Positive solutions for some functional equations. (Romanian summary) (82h:45008)

- Dancer, Edward Norman On the existence of bifurcating solutions in the presence of symmetries. (82a:58017)
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- Da Prato, G. See Barbu, Viorel, (82a:49011)
- De Basi, F. S. Generic properties for some classes of operator equations. (82d:47055)
- Elbakidze, N. V. A probabilistic representation of the solution of a Hammerstein-type equation. (Russian. Georgian and English summaries) (82b:60090)
- Evans, Lawrence C. On solving certain nonlinear partial differential equations by accretive operator methods. (82b:35032)
- de Figueiredo, Djairo Guedes See Berestycki, Henri, (82f:35078)
- Fitzgibbon, William E. Abstract hyperbolic integro-differential equations. (82k:45011)
- Fonari, A. A. A projection-iteration method. (Russian) (82c:58033)
- Fortunato, Renato Remarks on some nonlinear boundary value problems. (Italian summary) (82a:35042)
- Fučík, Svatopluk Nonlinear noncoercive problems. (82f:35056)
- Fujii, Hiroshi (with Yamaguti, Masaya) Structure of singularities and its numerical realization in nonlinear elasticity. (82c:73044)
- Gallouët, Thierry (with Kavian, Otar) Deux exemples de résultats d'existence et de nonexistence pour des problèmes ϵ -mi-linéaires à l'infini. (English summary) (82a:35072)
- Gonçalves, José Valdo A. On bounded nonlinear perturbations of an elliptic equation at resonance. (82b:35034)
- Gossez, Jean-Pierre Orlicz-Sobolev spaces and nonlinear elliptic boundary value problems. (82b:35061)
- Husnudinov, R. S. (with Husnudinova, N. B.) Solutions of a class of singular integral equations perturbed by a nonlinear term. (Russian) (82a:45005)
- Husnudinova, N. B. See Husnudinov, R. S., (82a:45005)
- Invernizzi, Sergio Surjectivity of perturbations of Fredholm mappings using semi-inner-products. (82f:58010)
- Ishii, Hitoshi Remarks on evolution equations with almost periodic forcing terms. (82f:34071)
- Ize, Jorge Periodic solutions of nonlinear parabolic equations. (82c:58013)
- Joseph, Daniel D. Factorization theorems and repeated branching of solutions at a simple eigenvalue. (82f:58031)
- Kaman, Rangachary See Cesari, Lamberto, (82d:35065a)
- Karasev, M. V. (with Maslov, V. P.) Algebras with general commutation relations and their applications. II. Operator unitary-nonlinear equations. (Russian) (See 82d:47025)
- Kavian, Otar See Gallouët, Thierry, (82a:35072)
- Kiffe, T. A Volterra integral equation and multiple valued functions. (82f:45002)
- Kosel, Ulrich Lokale Lösungen und Verzweigungen der Lösungen nichtlinearer Gleichungen. (82f:58032)
- Koz'mina, E. S. (with Laptev, G. I.) Solvability conditions for nonlinear equilibrium equations for thin shells. (Russian) (82a:73046)
- Krasnosel'skii, M. A. (with Muhamadiev, E. M.; Pokrovskii, A. V.) Bifurcation values of parameters in variational problems. (Russian) (82b:58029)
- Kravtits, Dimitrios Nonlinear random operators of monotone type in Banach spaces. (82c:60116)
- Kunisch, Karl (with Schappacher, Wilhelm) Variation of constants formulas for partial differential equations with delay. (82c:35162)
- Kurtz, J. C. See Chow, Shui Nee, (82f:58027)
- Lakshmikantham, V. (with Leela, S.) ★Nonlinear differential equations in abstract spaces. (82f:34072)
- Laptev, G. I. See Koz'mina, E. S., (82a:73046)
- Leela, S. See Lakshmikantham, V., (82f:34072)
- Lippold, G. Schätzung von Diskretisierungsfehlern bei der Lösung von Gleichungen in Banach-Räumen. (English and Russian summaries) [Estimation of discretization errors in the solution of equations in Banach spaces] (82m:65054)
- Loginov, B. V. Variational methods in bifurcation theory under conditions of group invariance. (Russian) (82g:58023)
Invariants and invariant solutions in bifurcation theory. II. (Russian) (82k:58033)
- Maksimov, V. P. On passage to the limit in boundary value problems for functional-differential equations. (Russian) (82m:34077)
- Marx, B. (with Vogel, J.) Analytizitätseigenschaften der Lösungen nichtlinearer Operatorgleichungen vom Hammerstein-Typ und rekursive Bestimmung ihrer Lösung. (English and Russian summaries) (82f:58033)
- Maslov, V. P. See Karasev, M. V., (See 82d:47025)
- Massabò, L. (with Nistri, P.; Pera, Maria Patrizia) A result on the existence of infinitely many solutions of a nonlinear elliptic boundary value problem at resonance. (Italian summary) (82a:35043)
- Mattioli, Nuvoletta (with Salvatori, M. Cesarina) A theorem of existence and uniqueness in nonlinear dispersive optics. (Italian. English summary) (82k:78001)
- Mawhin, Jean Monotonicity and two-point boundary value problems for nonlinear second order differential equations in Hilbert space. (82k:34069)
- Miersemann, Erich Über nichtlineare Eigenwertaufgaben in konvexen Mengen. (English summary) (82k:49018)
- Milani, Albert On a singular perturbation problem for the Maxwell equations in a multiply connected domain. (82k:78003)
- Mittelman, Hans-Detlef (with Weber, Helmut) Numerical methods for bifurcation problems—a survey and classification. (82d:58021)
- Moore, Gerald See Spence, A., (82c:65074)
- Muhamadiev, E. M. See Krasnosel'skii, M. A.; et al., (82b:58029)
- Nanda, Sribatsa (with Nanda, Sudarsan) A nonlinear complementarity problem in Banach space. (82a:90170)
- Nanda, Sudarsan See Nanda, Sribatsa, (82a:90170)
- Nieuwenhuis, J. W. About a local approximation theorem and an inverse function theorem. (82a:58007)
- Nistri, P. See Massabò, L.; et al., (82a:35043)
- Nohel, John A. Nonlinear Volterra equations for heat flow in materials with memory. (82g:45023)
- See also Clément, Ph., (82g:45022)
- Noor, M. Aslam Strongly nonlinear problems in a Hilbert space. (82j:47067)
- Ōtani, Mitsuharu (with Yamada, Yoshio) On the Navier-Stokes equations in noncylindrical domains: an approach by the subdifferential operator theory. (82g:35092)
- Padgett, W. J. Approximate solution of random nonlinear equations by random contractors. (82c:60117)
- Pascali, Dan On nonlinear divergence equations. (82c:35036)
Variational inequalities with obstacles. (82b:49014)
- Pera, Maria Patrizia See Massabò, L.; et al., (82a:35043)
- Pimbley, George H., Jr. On the nonoccurrence of secondary bifurcations in eigenvalue problems for nonlinear operators in Banach space. (82d:58022)
- Plotnikov, P. I. A variant of the Nash-Moser theorem. (Russian) (82c:58013)
- Pobolzaev, S. I. On subordinate operators of nonlinear equations. (Russian) (82j:35021)
- Pokrovskii, A. V. See Krasnosel'skii, M. A.; et al., (82b:58029)
- Rennolet, Charles Existence and boundedness results for abstract nonlinear Volterra equations of nonconvolution type. (82g:45024)
- Rjabov, Ju. A. Application of bounded operators and Lyapunov's majorizing equations to the analysis of differential equations with a small parameter. (82m:34036)
- Rusak, Ju. B. Problem of the points of bifurcation in the case of several parameters. (Russian) (82d:58023)
- Rzepecki, Bogdan A note on fixed point theorem of Maia. (Romanian summary) (82d:47056)
- Sankata, Nobuhiro Some remarks on quasilinear evolution equations in Banach spaces. (82c:34094)
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- Shearer, Michael Bifurcation of axisymmetric buckled states of a thin spherical shell. (82a:73022)
Coincident bifurcation of equilibrium and periodic solutions of evolution equations. (82m:58019)
- Shih, Mou Hsiang A further generalization of the Ostrowski theorem in Banach spaces. (82j:58015)
- Sidorov, N. A. Branching of solutions of nonlinear equations with a potential branching equation. (Russian) (82j:58039)
- Sparing, H.-D. Analytische Operatoren vektorieller Veränderlicher in reellen und komplexen Banachräumen. II. (82c:46057a)
Analytische Operatoren vektorieller Veränderlicher in reellen und komplexen Banachräumen. III. (82c:46057b)
- Spence, A. (with Moore, Gerald) A convergence analysis for turning points of nonlinear compact operator equations. (82c:65074)
- Steudel, Reinhard Zur eindeutigen Lösbarkeit eines nichtlinearen Operator-differentialgleichungssystems. (82c:34078)
- Stuart, C. A. Bifurcation for variational problems when the linearisation has no eigenvalues. (82c:58015)
- Szilagi, P. Boundary value problems for a nonlinear elliptic equation. (82c:35028)
- Tanabe, Hiroki Remarks on the differentiability of solutions of some semilinear parabolic equations. (82m:35082)
- Tiba, Dan Obstacle problems for first order partial differential operators. (82b:49016)
- Ugowski, Henryk On a certain infinite system of semilinear evolution equations. (82c:34079)
- Villela Bressan, Rosanna Flow invariant sets for functional-differential equations. (82g:34105)
- Vogel, J. See Marx, B., (82f:58033)
- Voss, Heinrich Positive solutions of superlinear boundary value problems. (82d:34025)
- Vrabie, Ioan I. Une méthode de compacité pour une classe d'équations d'évolution non linéaires. (English summary) [A compactness method for a class of nonlinear evolution equations] (82k:34071)
- von Wahl, Wolf On nonlinear evolution equations in a Banach space and on nonlinear vibrations of the clamped plate. (82f:35086)
- Weber, Helmut See Mittelman, Hans-Detlef, (82d:58021)
- Werner, Bodo Turning points of branches of positive solutions. (82f:58022)
- Yamada, Yoshio See Ōtani, Mitsuharu, (82g:35092)
- Yamaguti, Masaya See Fujii, Hiroshi, (82c:73044)
- Yoshimura, Tetz Existence and local uniqueness of solutions of the Percus-Yevick equation. (82c:82020)
- Zhang, Gong Qing Solutions of asymptotically linear operator equations via Morse theory. (82m:58015)

47H17 Methods for solving equations involving nonlinear operators {For numerical analysis, see 65J15.}

- Anselone, P. M. Discrete approximation of operator equations. 82m:47042
- Černyšenko, V. M. See Ogneva, V. A., 82f:47075
- Fonari, A. A. The projection-iteration method of steepest descent. (Russian) 82d:47071
Solution of nonlinear equations with monotone mapping in Hilbert space. (Russian) 82g:47044
- Gaponenko, Ju. L. A class of equations regularizable in the space of continuous functions. (Russian) 82d:47080
- Kartsatos, Athanassios G. Mapping theorems involving compact perturbations and compact resolvents of nonlinear operators in Banach spaces. 82c:47085
- Leonov, A. S. On the choice of the regularization parameter for nonlinear ill-posed problems with an approximately defined operator. (Russian) 82c:47079
- Liskovec, O. A. On the Maslov-Morozov property in the regularization method for nonlinear equations of the first kind. (Russian) 82c:47096
- Meleško, V. I. Perturbed iteration methods for determining L generalized solutions of nonlinear operator equations. (Russian) 82d:47097
- Nevanlinna, Olavi Global iteration schemes for monotone operators. 82b:47081

- Ogneva, V. A. (with Černyšenko, V. M.) An iteration process with successive approximation of the inverse operator. (Russian) **82f:47075**
- Serdjuckaja, L. F. The convergence of a nonstationary iterative method for solving operator equations in a semiordered Banach space. (Russian) **82f:47076**
- Svarčevskaja, N. A. Approximate solution of a nonlinear problem with a parameter through a combination of the Newton-Kantorovič method and the method of averaging functional corrections. (Russian) **82f:47077**
- Tanana, V. P. The solution of implicit operator equations of the first kind and their application. (Russian) **82b:47082**
- Zlepko, P. P. Application of the method of averaging functional corrections to the approximate construction of an implicit function. (Russian. English summary) **82a:47061**

secondary classifications:

- Ageev, A. L. Regularization of nonlinear operator equations on the class of discontinuous functions. (Russian) **(82b:65042)**
- Arslanov, F. H. See Kurčatov, V. A., (82e:65070)
- Balazs, M. On a method of third order. (Romanian summary) **(82e:65067)**
- Bassanini, Piero (with Filiaggi, Elvira) Iterative schemes and acceleration of convergence for contraction operators on the product of two Banach spaces. (Italian. English summary) **(82d:65047)**
- Bazley, Norman W. Abstract nonlinear wave equations: existence, linear and multilinear cases, approximation, stability. **(82i:34071)**
- Filiaggi, Elvira See Bassanini, Piero, (82d:65047)
- Fokas, A. S. (with Fuchssteiner, Benno) Bäcklund transformations for hereditary symmetries. **(82k:58006)**
- Fuchssteiner, Benno See Fokas, A. S., (82k:58006)
- Hegedüs, J. Two-sided approximations of the solutions of certain differential and operator equations. (Russian) **(82d:65048)**
- Kaman, Rangachary Stochastic approximation and nonlinear operator equations. **(82b:60077)**
- Kielhöfer, Hansjörg Degenerate bifurcation at simple eigenvalues and stability of bifurcating solutions. **(82b:58028)**
- Krawczyk, R. Interval extensions and interval iterations. (German summary) **(82f:65052)**
- Krotova, E. N. On a method for solving a system of nonlinear integral equations of Hammerstein type. (Russian) **(82k:45007)**
- Kurčatov, V. A. The method of linearized residuals for the approximate solution of functional equations. (Russian) **(82e:65069)**
- (with Arslanov, F. H.) L. V. Kantorovič's theorem for a class of methods of linearization of the approximate solution of functional equations. (Russian) **(82e:65070)**
- A difference linearization method that is optimal with respect to the order of error of numerical differentiation. (Russian) **(82d:65049)**
- Martinjuk, A. E. Application of methods of Galerkin type and combinatorial type to a nonlinear equation with a principal linear operator. (Russian) **(82j:65037)**
- Mosčėnkov, V. B. See Samoilėnko, A. M., (82c:35010)
- Neuberger, John W. Iteration for systems of nonlinear partial differential equations. **(82f:65066)**
- Potra, Florian Alexandru An application of the induction method of V. Pišk to the study of regula falsi. (Czech summary) **(82f:58013)**
- Rall, Louis B. ★Computational solution of nonlinear operator equations. **(82a:65041)**
- Rios, Hélène Une étude d'existence sur certains problèmes paraboliques. (English summary) **(82g:47042)**
- Samoilėnko, A. M. (with Mosčėnkov, V. B.) Iteration methods for solving nonlinear partial differential equations that are nearly linear. (Russian) **(82c:35010)**
- Scarpini, F. Some nonlinear complementarity systems algorithms and applications to unilateral boundary value problems. **(82b:49015)**
- Šerbinia, Ju. M. A class of iteration methods for the solution of nonlinear operator equations in a Banach space. (Ukrainian. Russian summary) **(82a:65042)**
- Scheurle, Jürgen Newton iterations without inverting the derivative. **(82e:65072)**
- Traub, J. F. (with Woźniakowski, H.) Convergence and complexity of interpolatory-Newton iteration in a Banach space. **(82g:58012)**
- Vaarmann, O. On a class of Levenberg-Marquardt-type methods. (Estonian and Russian summaries) **(82f:65068)**
- Wolfe, M. A. An existence-convergence theorem for a class of iterative methods. **(82i:65039)**
- Woźniakowski, H. See Traub, J. F., (82g:58012)

47H20 Semigroups of nonlinear operators [See also 58D07.]

- Abe, Hiroshi See Taniguti, Masataka; et al., **82f:47080**
- Barbu, Viorel A semigroup approach to an infinite delay equation in Hilbert space. **82i:47098**
- Jeggle, H. A general framework for the approximation of semigroups of nonlinear operators. **82b:47099**
- Kirk, W. A. (with Torrejón, Ricardo) Asymptotically nonexpansive semigroups in Banach spaces. **82a:47062**
- Kobayashi, Yoshikazu Nonlinear evolution operators in Banach spaces. **82a:47063**
- Pazy, A. Semigroups of nonlinear contractions and their asymptotic behaviour. **82f:47078**
- Plant, Andrew T. The differentiability of nonlinear semigroups in uniformly convex spaces. **82d:47072**
- Takahashi, Wataru A nonlinear ergodic theorem for an amenable semigroup of nonexpansive mappings in a Hilbert space. **82f:47079**
- Takahashi, Yoshitaka See Taniguti, Masataka; et al., **82f:47080**
- Taniguti, Masataka (with Takahashi, Yoshitaka; Abe, Hiroshi) On the asymptotic behavior of asymptotically nonexpansive semigroups in Banach spaces. **82f:47080**
- Torrejón, Ricardo See Kirk, W. A., **82a:47062**
- Villella Bressan, Rosanna On suitable spaces for studying functional equations using semigroup theory. **82i:47100**

- Vrabie, Ioan I. The nonlinear version of Pazy's local existence theorem. **82a:47064**
- Compactness methods and flow-invariance for perturbed nonlinear semigroups. **82i:47101**

secondary classifications:

- Donati, Flavio (with Matzeu, Michele) On the strong solutions of some nonlinear evolution problems in ordered Banach spaces. (Italian summary) **(82a:47057)**
- Graff, Richard A. A variant of the chain rule for differential calculus. **(82b:58017)**
- Heard, Melvin L. An abstract semilinear hyperbolic Volterra integro-differential equation. **(82b:45016)**
- Hirano, Norimichi See Takahashi, Wataru, (82m:47037)
- Kobayashi, Yoshikazu See Kobayashi, Kazuo; et al., (82b:34084)
- Kobayashi, Kazuo (with Kobayashi, Yoshikazu; Oharu, Shinnosuke) Two integral inequalities related to Bėnilan's integral solutions of nonlinear evolution equations. **(82b:34084)**
- (with Miyadera, Isao) On the strong convergence of the Cesàro means of contractions in Banach spaces. **(82b:47074)**
- Kuiper, Hendrik J. Invariant sets for nonlinear elliptic and parabolic systems. **(82b:35089)**
- Kunisch, Karl (with Schappacher, Wilhelm) Mild and strong solutions for partial differential equations with delay. **(82i:34100)**
- A semigroup approach to partial differential equations with delay. **(82b:35092)**
- Lakshmikantham, V. (with Leela, S.) ★Nonlinear differential equations in abstract spaces. **(82i:34072)**
- Leela, S. See Lakshmikantham, V., (82i:34072)
- Matzeu, Michele See Donati, Flavio, (82a:47057)
- Miyadera, Isao See Kobayashi, Kazuo, (82b:47074)
- Nisio, Makiko On stochastic optimal controls and envelope of Markovian semigroups. **(82i:49024)**
- On a nonlinear semigroup associated with stochastic optimal control and its excessive majorant. **(82j:93057)**
- Oharu, Shinnosuke See Kobayashi, Kazuo; et al., (82b:34084)
- OuYoung, Kuong Lin Periodic solutions of conservation laws. **(82a:34077)**
- Pavel, Nicolae H. Nonlinear evolution equations governed by f -quasidissipative operators. **(82i:34073)**
- Posiewnik, Andrzej Some remarks on dynamical semigroups. **(82d:20020)**
- Reich, Simeon Asymptotic behavior of resolvents in Banach spaces. (Italian summary) **(82f:47064)**
- Strong convergence theorems for resolvents of accretive operators in Banach spaces. **(82a:47050)**
- On the asymptotic behavior of nonlinear semigroups and the range of accretive operators. **(82c:47066)**
- Schappacher, Wilhelm See Kunisch, Karl, (82i:34100)
- Schechter, Eric Evolution generated by continuous dissipative plus compact operators. **(82b:47060)**
- Takahashi, Wataru (with Hirano, Norimichi) Recent topics in nonlinear functional analysis. On nonlinear ergodic theorems. (Japanese) **(82m:47037)**
- Vrabie, Ioan I. Compactness methods for an abstract nonlinear Volterra integro-differential equation. **(82d:45020)**

47H99 None of the above, but in this section

- Akō, Richard A. (with de Korvin, Andrė) Nonlinear integration on measures. **82g:47045**
- Some topological considerations for Hammerstein operators on L^p -spaces. **82k:47081**
- Antonovskii, E. Ja. The study of nonsmooth mappings of Hilbert spaces by methods of smooth analysis. (Russian) **82b:47083**
- Appell, Jürgen Ein Abbildungsgrad für approximierbare Operatoren in Banachräumen. **82d:47073**
- Banas, Józef On the measures of noncompactness in the spaces of continuous and integrable functions. (Russian summary) **82m:47043**
- Measures of noncompactness in the space of continuous tempered functions. **82j:47084**
- Cecchi, M. (with Marini, M.; Zezza, P. L.) A compactness theorem for integral operators and applications. **82b:47084**
- Conti, Giuseppe (with Iannacci, Rita) An intersection theorem for multivalued maps. **82i:47102**
- Daneš, Josef On the radius of a set in a Hilbert space. (See **82k:49004**)
- Ewert, Janina Homotopical properties and the topological degree for γ -contraction vector fields. (Russian summary) **82k:47082**
- Iannacci, Rita See Conti, Giuseppe, **82i:47102**
- Knowles, Ian W. (with Meidan, R.) On nonlinear nuclear operators. **82b:47103**
- de Korvin, Andrė (with Roberts, Charles E., Jr.) Double adjoints of Hammerstein functionals defined on continuous functions. **82f:47081**
- See also Akō, Richard A., **82g:47045**
- Kozłowski, Wojciech M. Nonlinear operators in Banach function spaces. **82k:47083**
- (with Szczypiński, Tomasz) A note on the Hammerstein operator in Köthe spaces. **82f:47082**
- Lucchetti, R. (with Patrone, F.) On Nemyskii's operator and its application to the lower semicontinuity of integral functionals. **82i:47104**
- Marini, M. See Cecchi, M.; et al., **82b:47084**
- Meidan, R. See Knowles, Ian W., **82b:47103**
- Meyer-Nieberg, Peter On permanence properties of sublinear operators. **82b:47084**
- Mininni, Michele (with Muni, Giuseppe) A degree theory with respect to a pseudo-inner product in a locally convex vector space. **82b:47085**
- Muni, Giuseppe See Mininni, Michele, **82b:47085**
- Patrone, F. See Lucchetti, R., **82i:47104**
- Povolockii, A. I. (with Redliĥ, S. M.) On the selection of a locally convex space for a Hammerstein-type operator. (Russian) **82j:47085**

- Redlich, S. M. See Porolockii, A. I., 82j:47085
 Roberts, Charles E., Jr. See de Korvin, André, 82f:47081
 Szczypinski, Tomasz See Kozłowski, Wojciech M., 82f:47082
 Valent, Tullio On the differentiability of Nemyskii operators. (Italian. English summary) 82f:47083
 Willem, Michel Densité de l'image de la différence de deux opérateurs. (English summary) 82e:47086
 Zazza, P. L. See Cecchi, M.; et al., 82h:47084

secondary classifications:

- Antonovskii, E. Ja. Construction of the degree for proper almost strongly Fredholm mappings. (Russian) (82b:58013)
 Denkowski, Zdzisław On the variational method without coerciveness. (See 82k:49004)
 Figueira, Mário (with Haraux, Alain) Théorèmes de surjectivité pour une classe d'opérateurs dans les espaces de Hilbert. (82d:47054)
 Fujimoto, Takao Nonlinear complementarity problems in a function space. (82k:90117)
 Haraux, Alain See Figueira, Mário, (82d:47054)
 Kenderov, Pet'ar S. Dense strong continuity of pointwise continuous mappings. (82d:46034)
 Kutateladze, S. S. Convex analysis in modules. (Russian) (82k:46014)
 Levašov, V. A. The structure of subdifferentials of continuous sublinear operators. (Russian) (82k:46020)
 Levy, Ronnie (with Rice, Michael D.) The number of compact fibers of mappings on Banach spaces. (82i:58010)
 Nguyen Van Lam On Möbius transformations in a Hilbert space. (82f:46024)
 Olsen, James H. The individual ergodic theorem for Lamperti contractions. (82h:47008)
 Onickanskii, M. B. Reconstruction of a sublinear operator as a supremum with respect to partial subdifferentials. (Russian) (82g:46019)
 Rice, Michael D. See Levy, Ronnie, (82i:58010)
 Tiba, Dan Regularization of saddle functions. (82h:90093)
 Vescan, Robert T. Existence of solutions for some quasivariational inequalities. (82c:49006)
 Wadati, Miki Generalized matrix form of the inverse scattering method. (See 82m:35001)

49-XX CALCULUS OF VARIATIONS AND OPTIMAL CONTROL; OPTIMIZATION [See also 34H05, 65Kxx, 90Cxx, 93-XX]

49-01 Elementary exposition, textbooks

- Biess, G. (with Erfurth, H.; Zeidler, G.) ★Optimale Prozesse und Systeme. (German) [Optimal processes and systems] 82k:49001
 Erfurth, H. See Biess, G.; et al., 82k:49001
 Findeisen, Władysław (with Szymanowski, Jacek; Wierzbicki, Andrzej P.) ★Teoria i metody obliczeniowe optymalizacji. (Polish) [Theory and numerical methods of optimization] 82c:49001
 Hestenes, Magnus R. ★Calculus of variations and optimal control theory. 82a:49001
 Hrusa, W. (with Troutman, J. L.) Elementary characterization of classical minima. 82f:49001
 Kuropatkin, P. V. ★Оптимальные и адаптивные системы. (Russian) [Optimal and adaptive systems] 82a:49002
 Szymanowski, Jacek See Findeisen, Władysław; et al., 82c:49001
 Troutman, J. L. See Hrusa, W., 82f:49001
 Urbaniec, Krzysztof ★Optymalizacja w projektowaniu aparatury procesowej. (Polish) [Optimization in the design of processing equipment] 82e:49001
 Wierzbicki, Andrzej P. See Findeisen, Władysław; et al., 82c:49001
 Zeidler, G. See Biess, G.; et al., 82k:49001

secondary classifications:

- El'mov, A. V. (with Zolotarev, Ju. G.; Terpigoreva, V. M.) ★Математический анализ (специальные разделы). Часть II. (Russian) [Mathematical analysis (special sections). Part II] (82k:00001b)
 Ermo'ev, Ju. M. (with Ljasko, I. I.; Mihaljević, V. S.; Tjuptja, V. I.) ★Математические методы исследования операций. (Russian) [Mathematical methods in operations research] (82e:90001)
 Greenspan, Donald ★Computer-oriented mathematical physics. (82h:70001)
 Ljasko, I. I. See Ermo'ev, Ju. M.; et al., (82e:90001)
 Mihaljević, V. S. See Ermo'ev, Ju. M.; et al., (82e:90001)
 Ponstein, J. ★Approaches to the theory of optimization. (82h:90071)
 Silov, G. E. ★Дифференцирование функций: высшие производные и вариационное исчисление. (Russian) [Differentiation of functions: higher derivatives and calculus of variations] (82j:26010)
 Terpigoreva, V. M. See El'mov, A. V.; et al., (82k:00001b)
 Tjuptja, V. I. See Ermo'ev, Ju. M.; et al., (82e:90001)
 Zabreiko, P. P. See Silov, G. E., (82j:26010)
 Zolotarev, Ju. G. See El'mov, A. V.; et al., (82k:00001b)

49-02 Advanced exposition (research surveys, monographs, etc.)

- Andreev, N. I. ★Теория статистически оптимальных систем управления. (Russian) [Theory of statistically optimal control systems] 82e:49002
 Cea, Jean Quelques méthodes sur la recherche d'un domaine optimal. 82a:49003
 Duvaut, Georges Cours sur les méthodes variationnelles et la dualité. 82k:49002
 Gregory, John ★Quadratic form theory and differential equations. 82d:49001
 Yvon, J. P. Contrôle optimal et sous-optimal des systèmes distribués. 82e:49003

secondary classifications:

- Aisagaliev, S. A. ★Анализ и синтез автономных нелинейных систем автоматического

управления (на основе второго метода Ляпунова). (Russian) [Analysis and synthesis of autonomous nonlinear automatic control systems (on the basis of Lyapunov's second method)] (82f:93001)

- Butkovskii, A. G. (with Gavrilov, M. A.; Krasnenker, A. S.; Poznjak, A. S.; Cypkin, Ja. Z.) Some problems in engineering cybernetics. (Russian) (82e:90003)
 Cypkin, Ja. Z. See Butkovskii, A. G.; et al., (82e:90003)
 Gavrilov, M. A. See Butkovskii, A. G.; et al., (82e:90003)
 Krasnenker, A. S. See Butkovskii, A. G.; et al., (82e:90003)
 Poznjak, A. S. See Butkovskii, A. G.; et al., (82e:90003)
 Logarithmic potential and other monographs ★The logarithmic potential and other monographs. (82j:01081)

49-03 Historical (must also be assigned at least one classification number from Section 01)

- Sydsaeter, Knut Optimal control theory—a mathematical discipline with classical roots and many applications. I. (Norwegian. English summary) 82b:49001
 Optimal control theory—a mathematical discipline with classical roots and many applications. II. (Norwegian. English summary) 82m:49001

secondary classifications:

- Bott, Raoul Marston Morse and his mathematical works. (82b:01037)
 Diaz, Joaquin Basilio See Weinstein, Alexander, (82i:01073)
 Dorofeeva, A. V. (with Tihomirov, V. M.) From the rule of the Lagrange multiplier to the Pontrjagin maximum principle (on the history of the necessary conditions for an extremum in problems with constraints). (Russian) (82g:01021)
 Mejibo, Lars C. Orthogonal trajectories 1694–1720. A chapter of the early history of analysis. (Danish. English summary) (82m:01031)
 (Morse, Marston) See Bott, Raoul, (82b:01037)
 Prékopa, András On the development of optimization theory. (Hungarian. English summary) (82c:01031)
 Tihomirov, V. M. See Dorofeeva, A. V., (82g:01021)
 Weinstein, Alexander ★Selecta. (82i:01073)
 Williamson, Frank, Jr. An historical note on the finite element method. (82b:01026)
 Bibliography:
 Morse, Marston See Bott, Raoul, (82b:01037)
 Weinstein, Alexander See Weinstein, Alexander, (82i:01073)
 Biography:
 Weinstein, Alexander See Weinstein, Alexander, (82i:01073)

49-04 Explicit machine computation and programs (not the theory of computation or programming)

49-06 Proceedings, conferences, etc.

- (Auslander, Alfred) See Optimization and optimal control, 82e:49004
 (Baidosov, V. A.) See Optimal control of systems with uncertain information, 82g:49002
 (Bensoussan, Alain) See Analysis and optimization of systems, 82b:49002
 (Collatz, Lothar) See Constructive methods of finite nonlinear optimization, 82g:49001
 (Dixon, L. C. W.) See Numerical optimisation of dynamic systems, 82a:49004
 (Kluge, Reinhard) See Nonlinear analysis, 82k:49004
 (Kuhla, K. Ja.) See Qualitative theory of optimal systems with continuous-discrete parameters, 82k:49005
 (Lions, Jacques-Louis) See Analysis and optimization of systems, 82b:49002
 (Luk'janov, A. T.) See Mathematical modeling and optimal control, 82k:49003
 (Meinardus, Günter) See Constructive methods of finite nonlinear optimization, 82g:49001
 (Oettli, Karl Werner) See Optimization and optimal control, 82e:49004
 (Stoer, Josef) See Optimization and optimal control, 82e:49004
 (Subbotin, A. I.) See Optimal control of systems with uncertain information, 82g:49002
 (Szegő, G. P.) See Numerical optimisation of dynamic systems, 82a:49004
 (Wetterling, Wolfgang) See Constructive methods of finite nonlinear optimization, 82g:49001

- Analysis and optimization of systems ★Analysis and optimization of systems. 82h:49002
 Berlin ★Nonlinear analysis. 82k:49004

- Conference:
 Analysis and Optimization of Systems ★Analysis and optimization of systems. 82h:49002

- Optimization and Optimal Control ★Optimization and optimal control. 82e:49004
 Constructive methods of finite nonlinear optimization ★Konstruktive Methoden der finiten nichtlinearen Optimierung. (German) [Constructive methods of finite nonlinear optimization] 82g:49001

- Dynamic systems ★Numerical optimisation of dynamic systems. 82a:49004
 Mathematical modeling and optimal control ★Математическое моделирование и оптимальное управление. (Russian) [Mathematical modeling and optimal control] 82k:49003

- Meeting:
 Constructive Methods of Finite Nonlinear Optimization ★Konstruktive Methoden der finiten nichtlinearen Optimierung. (German) [Constructive methods of finite nonlinear optimization] 82g:49001

- Nonlinear analysis ★Nonlinear analysis. 82k:49004
 Numerical optimisation of dynamic systems ★Numerical optimisation of dynamic systems. 82a:49004

- Oberwolfach ★Konstruktive Methoden der finiten nichtlinearen Optimierung. (German) [Constructive methods of finite nonlinear optimization] 82g:49001
 ★Optimization and optimal control. 82e:49004

- Optimal control ★Optimization and optimal control. 82e:49004
 Optimal control of systems with uncertain information ★Оптимальное управление системами с неопределенной информацией. (Russian) [Optimal control of systems

with uncertain information] 82g:49002

Optimization ★Analysis and optimization of systems. 82b:49002

★Konstruktive Methoden der finiten nichtlinearen Optimierung. (German) [Constructive methods of finite nonlinear optimization] 82g:49001

Optimization and optimal control ★Optimization and optimal control. 82e:49004

Qualitative theory of optimal systems with continuous-discrete parameters

★Качественная теория оптимальных систем с непрерывно-дискретными параметрами. (Russian) [Qualitative theory of optimal systems with continuous-discrete parameters] 82k:49005

Summer School:

Nonlinear Analysis ★Nonlinear analysis. 82k:49004

Versailles ★Analysis and optimization of systems. 82b:49002

secondary classifications:

(Gihman, I. I.) See Theory of random processes. (82i:60003)

(Leipholz, Horst) See Structural control. (82g:93003)

(Nash, Peter) See Systems modelling and optimization. (82m:90002)

(Sobolev, S. L.) See Theory of cubature formulas and the application of functional analysis to problems of mathematical physics. (82j:65001)

(Uspenskii, S. V.) See Theory of cubature formulas and the application of functional analysis to problems of mathematical physics. (82j:65001)

Analyse et contrôle de systèmes ★Analyse et contrôle de systèmes. (English) [Analysis and control of systems] (82f:60004)

Analysis and control of systems ★Analyse et contrôle de systèmes. (English) [Analysis and control of systems] (82f:60004)

Control ★Structural control. (82g:93003)

IRIA Seminar:

Analysis and Control of Systems ★Analyse et contrôle de systèmes. (English)

[Analysis and control of systems] (82f:60004)

Proceedings of the S. L. Sobolev Seminar, No. 1 ★Теория кубатурных формул и приложения функционального анализа к задачам математической физики. (Russian) [Theory of cubature formulas and the application of functional analysis to problems of mathematical physics] (82j:65001)

Rocquencourt ★Analyse et contrôle de systèmes. (English) [Analysis and control of systems] (82f:60004)

Structural control ★Structural control. (82g:93003)

Symposium:

IUTAM, Structural Control ★Structural control. (82g:93003)

Systems ★Analyse et contrôle de systèmes. (English) [Analysis and control of systems] (82f:60004)

Systems modelling and optimization ★Systems modelling and optimization. (82m:90002)

Theory of cubature formulas and the application of functional analysis to problems of mathematical physics ★Теория кубатурных формул и приложения функционального анализа к задачам математической физики. (Russian) [Theory of cubature formulas and the application of functional analysis to problems of mathematical physics] (82j:65001)

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- Duvaut, Georges Élasticité avec frottement visqueux. Cas linéaire. (English summary) (82b:73021)
- Thermoélasticité avec contact unilatéral. (82b:73080)
- Elliott, Charles M. On the finite element approximation of an elliptic variational inequality arising from an implicit time discretization of the Stefan problem. (82d:65072)
- (with Janovský, Vladimír) A variational inequality approach to Hele-Shaw flow with a moving boundary. (82d:76031)
- Feijóo, Raúl A. See Do, Claude; et al., (82b:73028) and Moura, Carlos A.; et al., (82b:73028)
- Fortuné, Danielle (with Bézine, Gérard) Sur le contact sans frottement de deux plaques chargées en flexion. (English summary) [On the frictionless contact of two bending plates] (82b:73073)
- Friedman, Avner (with Pozzi, Gianni A.) The free boundary for elastic-plastic torsion problems. (82c:35165)
- Free boundaries in elastic-plastic problems. (82m:35145)
- Fusco, Giorgio An example of bifurcation in hydrostatics. (82f:58030)
- Germain, Paul Comments on: "Duality and relaxation in the variational problems of plasticity" [J. Mécanique 19 (1980), no. 3, 493–527] by R. Temam and G. Strang. (French summary) (82b:73017b)
- Hanouzet, Bernard See Platone Garroni, Maria Giovanna; et al., (82m:35063)
- Hilbig, H. Existenzsatz für Potentialströmungen mit Totwassern um zwei geradlinige Hindernisse. (English and Russian summaries) (82b:76009)
- Janovský, Vladimír (with Procházka, Petr) Contact problem of two elastic bodies. I, II, III. (Russian and Slovak summaries) (82b:73053)
- See also Elliott, Charles M., (82d:76031)
- Jean, Michel (with Nayroles, Bernard) Signorini problem in linear viscoelasticity. (See 80k:49001)
- Joly, Jean-Luc See Platone Garroni, Maria Giovanna; et al., (82m:35063)
- Kikuchi, Noboru See Ohtake, K.; et al., (82c:73047a) and (82c:73047b)
- Kravčuk, A. S. On the theory of contact problems taking account of friction on the contact surface. (82g:73046)
- Kuz'menko, V. I. On the variational method in the theory of contact problems for nonlinearly elastic laminated bodies. (82b:73017)
- Lions, Jacques-Louis See Bensoussan, Alain, (82c:49076)
- Litvinov, V. G. (with Medvedev, N. G.) Complementary methods in the problems of the state of stress in shells of revolution. (82g:73042)
- Lucchetti, R. (with Patrone, F.) A characterization of Tyhonov well-posedness for minimum problems, with applications to variational inequalities. (82m:49036)
- Macovei, Doina (with Pascali, Dan) Variational inequality techniques in free boundary problems. (82b:76066)
- Madaune-Tort, Monique Sur un problème de perturbations singulières pour des inéquations variationnelles de type parabolique dégénéré. (English summary) (82b:35016)
- Mancino, Otello Giacomo (with Caprili, M.) Approximate resolution of a problem of filtration through a porous medium. (Italian. English summary) (82a:76081)
- Mazur, V. D. The theory and applications of committer constructions. (Russian) (82b:90111)
- Medeiros, L. A. Initiations to elliptic variational inequalities. (Portuguese) (82b:35084)
- Medvedev, N. G. See Litvinov, V. G., (82g:73042)
- Menaldi, José-Luis On the optimal stopping time problem for degenerate diffusions. (82f:60092a)
- On the optimal impulse control problem for degenerate diffusions. (82f:60092b)
- Menchi, O. See Cimatti, G., (82j:35138)
- Mignot, Fulbert (with Puel, Jean-Pierre) Sur une classe de problèmes non linéaires avec non linéarité positive, croissante, convexe. (82g:35041)
- Mihlin, S. G. Error of the approximate solution of one-sided variational problems. (Russian. English summary) (82f:65070)
- Mittelmann, Hans-Detlef On the efficient solution of nonlinear finite element equations. II. Bound-constrained problems. (82j:65043)
- Moroşanu, George Regularity of solutions of variational inequalities in Hilbert spaces. (82a:47059)
- Moura, Carlos A. (with Raupp, Marco A.; Feijóo, Raúl A.) Analysis of a mathematical model for the motion of a pile thrust into the soil. (82d:73028)
- Nakoulina, Ousseynou Sur un système d'inéquations quasi variationnelles bilatérales associé à un problème de jeu stochastique à somme non nulle. (English summary) (82b:93034)

- Nayroles, Bernard See Jean, Michel. (See 80k:49001)
- Necas, Jindřich Variational inequalities in elasticity and plasticity with application to Signorini's problems and to flow theory of plasticity. (82h:73027)
- Nicolosenko, B. See Braumer, C. M., (82c:59005)
- Noor, M. Aslam Error estimates for the finite element solutions of variational inequalities. (82k:65066)
- Oden, J. T. See Ohtake, K.; et al., (82c:73047a) and (82c:73047b)
- Ohtake, K. (with Oden, J. T.; Kikuchi, Noboru) Analysis of certain unilateral problems in von Kármán plate theory by a penalty method. I. A variational principle with penalty. (82c:73047a)
- (with Oden, J. T.; Kikuchi, Noboru) Analysis of certain unilateral problems in von Kármán plate theory by a penalty method. II. Approximation and numerical analysis. (82c:73047b)
- Panagiotopoulos, P. D. Dynamic and incremental variational inequality principles, differential inclusions and their applications to co-existent phases problems. (German summary) (82j:73014)
- Pascali, Dan See Macovei, Doina, (82e:76066)
- Patrone, F. See Lucchetti, R., (82m:49036)
- Pierre, Michel Problèmes d'évolution avec contraintes unilatérales et potentiels paraboliques. (82g:35062)
- Platone Garroni, Maria Giovanna (with Hanouzet, Bernard; Joly, Jean-Luc) Régularité pour la solution d'un système I.Q.V. (Italian summary) (82m:35063)
- Pozzi, Gianni A. See Friedman, Avner, (82i:35165)
- Primicerio, Mario Diffusion problems with a free boundary. (Italian) (82i:35166)
- Procházka, Petr See Janovský, Vladimír, (82h:73053)
- Puel, Jean-Pierre See Mignot, Fulbert, (82g:35041)
- Ramaswamy, S. The Lax-Milgram theorem for Banach spaces. I. (82e:47015a)
- The Lax-Milgram theorem for Banach spaces. II. (82e:47015b)
- Raupp, Marco A. See Do, Claude; et al., (82h:73028) and Moura, Carlos A.; et al., (82h:73028)
- Sburian, Silviu Variational inequalities in finite elastostatics. (82j:73015)
- Shimbori, Elud Variational inequalities arising in the theory of two-dimensional potential flows. (82g:76012)
- Šolhet, B. A. See Arutjunjan, N. H., (82h:73020)
- Spruck, Joel Regularity in elliptic free boundary problems. (82k:35052)
- Strang, Gilbert See Temam, Roger, (82i:73017a) and Germain, Paul, (82i:73017b)
- Tanabe, Hiroki Differentiability of solutions of some unilateral problem of parabolic type. (82m:35090)
- Tandit, B. V. Theorems on traces for the classes $L^2_{p,q}$ and their application to the solution of a variational problem. (Russian) (82e:46045b)
- Temam, Roger (with Strang, Gilbert) Duality and relaxation in the variational problems of plasticity. (French summary) (82i:73017a)
- See also Germain, Paul, (82i:73017b)
- Torelli, Alessandro A remark on a free boundary problem. (Italian summary) (82m:76061)
- Troianello, Giovanni M. Unilateral Dirichlet problems of the nonvariational type. (82i:35052)
- Visintin, Augusto Existence results for some free boundary filtration problems. (Italian summary) (82d:35106)
- Weinelt, W. Net approximation of variational inequalities. (Russian) (82b:65056)
- Wood, W. L. See Craig, A. W., (82i:76085)

49A34 Problems involving functional relations other than differential equations

- Ahmedov, F. Š. New necessary conditions for variational problems in a class of functions of several variables. (Russian. Azerbaijani and English summaries) 82a:49016
- Aliiev, F. A. Optimization of a linear nonstationary discrete system. (Russian. Azerbaijani and English summaries) 82i:49010
- Balder, E. J. On a useful compactification for optimal control problems. 82c:49007
- Barabanov, A. E. Optimal control of a nonminimal-phase discrete object with arbitrary bounded noise. (Russian. English summary) 82d:49013
- Janiševskii, R. T. On the existence of the solution of an optimal control problem for time-lag systems. 82h:49009
- Mercier, Omer L. Necessary and sufficient conditions for designing optimal feedback controllers for linear dynamical systems with multiple time delays. 82m:49017
- Sakabekov, A. Justification of the variational principle for a system of the method of spherical harmonics in x - y geometry. (Russian) 82d:49014
- Schrodi, Ewald ★Optimale Steuerung linearer dynamischer Systeme durch Lösen Fredholmscher Integralgleichungen. (German) [Optimal control of linear dynamic systems through the solution of Fredholm integral equations] 82i:49011

secondary classifications:

- Čibej, Jože Andrej Biological systems and optimal control. (Slovenian. English summary) (82m:92001)
- Lee, E. B. Generalized quadratic optimal controllers for linear hereditary systems. (82d:93025)

49A36 Optimal solutions belonging to restricted classes (bang-bang controls, etc.)

- Akulenko, L. D. Asymptotic solution of certain nonlinear problems of time-optimal response. 82j:49008
- Andreini, Alessandra (with Bacciotti, Andrea) Bang-bang and relay principles for time-dependent constraint sets. 82m:49018
- Bacciotti, Andrea See Andreini, Alessandra, 82m:49018
- Caligaris, Ottavio (with Oliva, Pietro) Existence theorems for moving boundary optimization problems. 82h:49018
- Dodds, S. J. Bang-bang control law for single-input time-invariant plant. 82k:49019

- Fuller, A. T. Time-optimal control on state axes. 82g:49009
- Iacob, F. Optimal impulsive control of linear evolutionary processes with quadratic performance index in Hilbert spaces. 82k:49020
- Oliva, Pietro See Caligaris, Ottavio, 82h:49018
- Powers, W. F. On the order of singular optimal control problems. 82f:49009
- Valadier, Michel Régularisation s.c.i., relaxation et théorèmes bang-bang. (English summary) [Closedness, relaxation and bang-bang theorems] 82m:49019

secondary classifications:

- Phan Văn Chu'ng Sur l'existence de sections séparément mesurables et séparément absolument continues d'une application multivoque. Applications aux équations intégrales multivoques. (82e:28013)

49A40 Minimax problems

- Belen'kii, A. S. Finding saddle points on convex polyhedra in minimax optimization problems with linear constraints. 82j:49009
- Filippova, T. F. A minimax problem of programmed control with connected constraints. (Russian) 82m:49020
- Pomerol, J.-Ch. About a minimax theorem of Matthies, Strang and Christiansen. 82g:49010
- Stacho, László L. Minimax theorems beyond topological vector spaces. 82a:49017
- Thews, Klaus T -periodic solutions of time dependent Hamiltonian systems with a potential vanishing at infinity. 82g:49011

secondary classifications:

- Amann, Herbert (with Zehnder, Eduard) Periodic solutions of asymptotically linear Hamiltonian systems. (82i:58026)
- Ambrosetti, Antonio (with Mancini, Giovanni) Solutions of minimal period for a class of convex Hamiltonian systems. (82j:58043)
- Arnold, V. I. Steady oscillations with potential energy harmonic in space and periodic in time. (82h:70025)
- Aulbach, Bernd Behavior of solutions near manifolds of periodic solutions. (82k:34053)
- Bahri, Abbas (with Berestycki, Henri) Existence d'une infinité de solutions périodiques pour certains systèmes hamiltoniens en présence d'un terme de contrainte. (English summary) (82h:58023)
- Benci, Vieri A geometrical index for the group S^1 and some applications to the study of periodic solutions of ordinary differential equations. (82k:58040)
- Berestycki, Henri See Bahri, Abbas, (82h:58023)
- Brézis, Haim (with Coron, Jean-Michel) Periodic solutions of nonlinear wave equations and Hamiltonian systems. (82g:35007)
- Burton, Thomas D. A time transformation method for analysis of periodic nonlinear systems. (82b:34044)
- Coron, Jean-Michel See Brézis, Haim, (82g:35007)
- Ekeland, Ivar (with Lasry, Jean-Michel) Problèmes variationnels non convexes en dualité. (English summary) (82g:58021)
- Kirchgässner, Klaus Periodic and nonperiodic solutions of reversible systems. (82g:58066)
- Lasry, Jean-Michel See Ekeland, Ivar, (82g:58021)
- Mancini, Giovanni See Ambrosetti, Antonio, (82j:58043)
- Mawhin, Jean Semilinear equations of gradient type in Hilbert spaces and applications to differential equations. (82i:47095)
- Nakonečnii, O. G. Minimax estimations of parameters. (Russian. English summary) (82a:34079)
- Ni, Wei Ming Some minimax principles and their applications in nonlinear elliptic equations. (82h:58024)
- Rabinowitz, Paul H. Critical points of indefinite functionals and periodic solutions of differential equations. (82e:58043)
- On periodic solutions of Hamiltonian systems of ordinary differential equations. (See 82m:34003)
- Zehnder, Eduard See Amann, Herbert, (82i:58026)
- Zhang, Gong Qing Variational methods for nondifferentiable functionals and their applications to partial differential equations. (82h:35025)

49A45 Game theory; pursuit and evasion [See also 90Dxx.]

- Blaquière, Augustin Necessary and sufficiency conditions for optimal strategies in impulsive control. 82g:49012
- See also Ray, Alan Everton, 82e:49023
- Černous'ko, F. L. Controlled search of a moving object. 82h:49010
- Poliščuk, E. G. Upper estimate for the value of a linear differential game. 82h:49011
- Ray, Alan Everton (with Blaquière, Augustin) Sufficient conditions for optimality of threat strategies in a differential game. 82e:49023

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- Azamov, A. On the number of intersections of solutions of a piecewise linear system with a sewing line. (Russian) (82i:34054)
- Ivanov, R. P. Simple pursuit-evasion on a compactum. (Russian) (82d:90143)
- Leitmann, G. Guaranteed avoidance strategies. (82e:90128)
- Pasikov, V. L. A problem of encounter of motions for integral equations. (Russian) (82d:90140)
- Shezion, Dymitr Regularity of the optimal time and of the synthesis of optimal controls in linear antagonistic processes. (Polish. English summary) (82f:90119)
- Zak, V. L. On a problem of evading many pursuers. (82m:90187)

49A50 Topology of solutions, weak and strong minima, semicontinuity, convexity, orientor fields

- Angell, Thomas S. A note on approximation of optimal solutions of free problems of the

calculus of variations. **82a:49018**

Balder, E. J. Lower semicontinuity of integral functionals with nonconvex integrands by relaxation-compactification. **82b:49012**

Bottaro, Gianfranco (with Oppezz, Piro) Lower semicontinuity of an integral functional depending on functions of class L^p with values in a Banach space. (Italian. English summary) **82j:49010**

(with Oppezz, Piro) Necessary conditions for the lower semicontinuity of an integral functional that depends on functions with values in a Banach space. (Italian. English summary) **82f:49010**

Bouchitté, Guy Résolution numérique d'un problème d'optimisation intégral-différentielle dans le cas de lois de comportement exponentiel et logarithmique. **82b:49019**

Infconvolution et relaxation-projection dans les espaces de Banach non réflexifs. Approximation de la minimisation d'une fonctionnelle intégrale. (English summary) **82c:49024**

Buttazzo, Giuseppe (with Dal Maso, Gianni) Γ -limits of integral functionals. **82c:49011**

Carbone, Luciano (with Colombini, Ferruccio) On convergence of functionals with unilateral constraints. **82j:49011**

Colombini, Ferruccio See **Carbone, Luciano**, **82j:49011**

Čugunov, P. I. Correct solutions of differential inclusions. (Russian) **82f:49012**

Dal Maso, Gianni See **Buttazzo, Giuseppe**, **82f:49011**

Dolecki, Szymon Semicontinuity in constrained optimization. I. I. Metric spaces. (Polish and Russian summaries) **82m:49021a**

Semicontinuity in constrained optimization. Ib. Norm of spaces. **82m:49021b**

Semicontinuity in constrained optimization. II. (Polish and Russian summaries) **82m:49021c**

Ferro, Francesco Lower semicontinuity, optimization and regularizing extensions of integral functionals. **82b:49013**

Kaiser, Paul J. Seminormality properties of convex sets. **82b:49020**

Kun, L. A. Time-optimal control of systems with canonical vectorgrams. **82c:49008**

Olech, C. Lower semicontinuity of integral functionals. **82f:49013**

Oppezz, Piro See **Bottaro, Gianfranco**, **82f:49010** and **82j:49010**

Serre, Denis Relations d'ordre entre formes quadratiques en compacité par compensation. (English summary) **82c:49025**

Vasilenko, G. N. On the weak continuity of Jacobians. (Russian) **82j:49012**

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Bardaro, Carlo (with Gori Cocchieri, Candida) On the extension of a theorem of E. Baiada to multifunctions. (Italian) **(82g:54030)**

Bouchitté, Guy Approximation interne de problèmes convexes du calcul des variations dans les espaces de type Sobolev-Orlicz: éléments finis et intégration numérique. **(82c:49055)**

Candeloro, Domenico (with Pucci, Patrizia) A criterion for weak compactness in the sense of Dunford and Pettis. (Italian. English summary) **(82d:46045)**

Dal Maso, Gianni See **De Giorgi, Ennio**; et al., **(82m:49013)**

De Giorgi, Ennio (with Dal Maso, Gianni; Longo, Placido) Γ -limits of obstacles. (Italian. English summary) **(82m:49013)**

Fennich, Rachida Différentiabilité de la norme modulaire dans les espaces L_p et E_p . **(82k:58016)**

Gähler, Siegfried Remarks on topologies in optimization theory. **(82m:49011)**

Gori Cocchieri, Candida See **Bardaro, Carlo**, **(82g:54030)**

Hadžić, Olga On multivalued mappings in paranormed spaces. **(82f:47070)**

Hiriart-Urruty, J.-B. A note on the mean value theorem for convex functions. (Italian summary) **(82b:26007)**

Longo, Placido See **De Giorgi, Ennio**; et al., **(82m:49013)**

Lucchetti, R. (with Patrone, F.) On Nemytski's operator and its application to the lower semicontinuity of integral functionals. **(82f:47104)**

Matei, Pavel Evolution equations with time-dependent domains. **(82c:34074)**

Patrone, F. See **Lucchetti, R.**, **(82f:47104)**

Popescu, Vasile Existence for an abstract control problem in Banach spaces. **(82d:49008)**

Pucci, Patrizia See **Candeloro, Domenico**, **(82d:46045)**

Rogula, Dominik (with Szyten, Malgorzata) On one-dimensional models in nonlocal elasticity. **(82b:73004)**

Showalter, R. E. Singular nonlinear evolution equations. **(82c:34077)**

Szyten, Malgorzata See **Rogula, Dominik**, **(82b:73004)**

49A51 Fréchet and Gâteaux differentiability

Auslender, Alfred Sur la différentiabilité de la fonction d'appui du sous-différentiel à ϵ -près. (English summary) **82b:49021**

Gähler, Siegfried Generalized notions of differentiability and their application in optimization theory. **82c:49021**

Ioffe, Alexandre D. Sous-différentielles approchées de fonctions numériques. (English summary) **82c:49026**

Zălinescu, Constantin On an abstract control problem. **82d:49015**

secondary classifications:

Dayal, S. k -discrete differentials of certain operators on Banach spaces. **(82j:58017)**

Ioffe, Alexandre D. Nonsmooth analysis: differential calculus of nondifferentiable mappings. **(82j:58018)**

Kusraev, A. G. On a general method of subdifferentiation. (Russian) **(82i:58014)**

de León, Manuel (with Villaverde, Carlos) Calcul différentiel sur les fibrés tangents d'ordre supérieur. (English summary) **(82f:58016)**

Potra, Florian Alexandru An application of the induction method of V. Piák to the study of regula falsi. (Czech summary) **(82f:58013)**

Spingarn, Jonathan E. Submonotone subdifferentials of Lipschitz functions. **(82g:26016)**

Thibault, Lionel Cônes tangents et épi-différentiels de fonctions vectorielles. **(82b:26015)**

Subdifferentials of compactly Lipschitzian vector-valued functions. **(82b:58006)**

Turinici, Mihai Function Lipschitzian mappings on convex metric spaces. **(82i:54054)**

Villaverde, Carlos See **de León, Manuel**, **(82f:58016)**

49A55 Duality theory

secondary classifications:

Klimov, V. S. Nontrivial solutions of equations with potential operators. (Russian) **(82g:47038)**

49A60 Optimal stochastic control [See also 93Exx.]

Arkin, B. I. (with Saksonov, M. T.) To the maximum principle theory for problems of control of stochastic differential equations. **82g:49013**

Baklan, V. V. Control of random elements with values in Hilbert space. (Russian) **82m:49022**

Basirov, A. E. A separation theorem for a stochastic problem of optimal control in Hilbert space. (Russian. Azerbaijani and English summaries) **82j:49013**

On the stochastic principle of the maximum for evolutionary systems. (Russian. Azerbaijani and English summaries) **82k:49022**

Gauvrit, M. See **Sastry, D.**, **82b:49014**

Groh, Jürgen On the optimal control of one-dimensional quasidiffusion processes. **82k:49023**

Hausmann, U. G. On the adjoint process for optimal control of diffusion processes. **82c:49012a**

Erratum: "On the adjoint process for optimal control of diffusion processes" [SIAM J. Control Optim. **19** (1981), no. 2, 221-243]. **82c:49012b**

Kučera, Vladimír New results in state estimation and regulation. **82j:49014**

Levine, Jean Principe d'optimalité et principe de séparation en contrôle stochastique à information incomplète non classique. (English summary) **82f:49014**

Nisio, Makiko On stochastic optimal controls and envelope of Markovian semigroups. **82c:49024**

Pavon, M. (with Wets, Roger J.-B.) A stochastic variational approach to the duality between estimation and control: discrete-time. **82g:49014**

Saksonov, M. T. See **Arkin, B. I.**, **82g:49013**

Sastry, D. (with Gauvrit, M.) Optimal simultaneous maximum a posteriori estimation of states, noise statistics and parameters. I. Algorithm. **82b:49014a**

(with Gauvrit, M.) Optimal simultaneous maximum a posteriori estimation of states, noise statistics and parameters. II. Numerical performance. **82b:49014b**

Snirmov, I. P. Optimal control of a dynamic system with random parameters under incomplete information. **82j:49015**

Tesfatsion, Leigh Criterion decomposition for myopic sequential control of uncertain systems. **82a:49019**

Wets, Roger J.-B. See **Pavon, M.**, **82g:49014**

secondary classifications:

Brémaud, Pierre ★Point processes and queues. **(82m:60058)**

Davis, M. H. A. (with Wan, C. B.) The principle of optimality for Markov jump processes. **(82a:93073)**

Fomin, V. N. See **Semenov, S. G.**, **(82c:93024)**

Friedman, Avner Stochastic control with partial observations. **(82b:93052)**

Garipov, E. M. Identification of nonlinear dynamical systems by means of Volterra series. (Bulgarian. Russian and English summaries) **(82a:93066)**

Groh, Jürgen Optimal control of one-dimensional nonconservative quasidiffusion processes. **(82b:93053)**

Morimoto, Hiroaki The space BMO and optimal exponential martingales. **(82j:60078)**

Reid, D. W. (with Teo, K. L.) Hitting a target with maximum probability. **(82i:93097)**

Semenov, S. G. (with Fomin, V. N.) Linearity of optimal control of a linear discrete system with steady noise. (Russian. English summary) **(82c:93024)**

Teo, K. L. See **Reid, D. W.**, **(82i:93097)**

Veretennikov, A. Ju. On the existence of the optimal policy for a multidimensional quasidiffusion controlled process. **(82g:93056)**

Vermes, D. Extremality properties of the optimal strategy in Markovian control problems. **(82b:93055)**

Wan, C. B. See **Davis, M. H. A.**, **(82a:93073)**

49A99 None of the above, but in this section

Bradley, John Spurgeon (with Hinton, Don B.; Kauffman, Robert M.) On the minimization of singular quadratic functionals. **82f:49015**

Buttazzo, Giuseppe (with Dal Maso, Gianni) Integral representation on $W^{1,\infty}(\Omega)$ and $BV(\Omega)$ of limits of variational integrals. (Italian summary) **82c:49009**

Cruz, J. B., Jr. See **Papavasiliopoulos, G. P.**, **82i:49013**

Dal Maso, Gianni See **Buttazzo, Giuseppe**, **82c:49009**

De Giorgi, Ennio (with Franzoni, Tullio) On a type of variational convergence. (Italian. English summary) **82b:49022**

Franzoni, Tullio See **De Giorgi, Ennio**, **82b:49022**

Gabasov, R. F. Questions in the constructive theory of optimal control. (Russian) **82k:49025**

Hinton, Don B. See **Bradley, John Spurgeon**; et al., **82f:49015**

Kauffman, Robert M. See **Bradley, John Spurgeon**; et al., **82f:49015**

Komarov, V. A. Estimate of response time in linear systems. (Russian) **82b:49023**

Malicki, A. A. A variational problem in a class of indicators and its connection with the theory of experiments. (Russian. English summary) **82a:49020**

Papavasiliopoulos, G. P. (with Cruz, J. B., Jr.) A control problem with structural choices. **82i:49013**

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Bardaro, Carlo (with Pucci, Patrizia) An existence theorem for generalized differential equations in Banach spaces. (Italian) **(82f:47072)**

Di Blasio, G. A synthesis problem for the optimal control of epidemics. **(82b:92029)**

Hu, Hai Chang On a variational principle in the theory of dynamic stability of elastic

- systems. (82b:73032)
- Konek, Andrej. Convex integral functionals on Orlicz spaces. (82c:46058)
- Phan Van Chu'ng. Densité des sections extrémales d'une multiapplication mesurable. (82c:46059)
- Pucci, Patrizia. See Bardaro, Carlo, (82f:47072)
- Razmadze, S. A. Optimization of the longitudinal profile of a span of a subway tunnel route without special constraints. (Russian) (82a:90041)
- 49Bxx Necessary conditions and sufficient conditions for optimality**
- 49B05 Free problems in one independent variable**
- Hamilton, Eugene P. A new definition of variational derivative. 82a:49021
- Hildebrand, S. K. See Milnes, Harold Willis, 82a:49022
- Milnes, Harold Willis (with Hildebrand, S. K.) Endpoint conditions for the problem of extremizing a nonparametric integral in the plane. 82a:49022
- 49B10 Problems involving ordinary differential equations, optimal control**
- Akaleko, L. D. Time-optimal stabilization of a perturbed system with invariant norm. 82a:49026
- Optimal synthesis in certain terminal control problems. 82a:49027
- Allwright, J. C. Deterministic optimal control, given only a partial observation of the initial state. 82a:49016
- Anisovič, V. V. (with Krjukov, B. I.; Madorskii, V. M.) An approach to solving optimal control problems. (Russian) 82j:49016
- Arutjunov, A. V. Time optimal processes with a linear control equation. (Russian. English summary) 82a:49014
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- Bakirtz, A. G. See Koussioris, Trifon G., 82b:49026
- Balzer, L. A. Optimal control with partial review of disturbances and rate penalties and its application to vehicle suspension. 82c:49010
- Bell, D. J. (with Katusime, F.) A time-optimal drug displacement problem. 82j:49018
- Bien, Zeungnam (with Chyung, D. H.) Optimal control of delay systems with a final function condition. 82a:49016
- (with Chyung, D. H.) On function-target control of dynamic systems with delays in state and control under bounded-state constraints. 82a:49028
- Brunovský, Pavol. Existence of regular synthesis for general control problems. 82f:49016
- Callier, Frank M. (with Willems, Jacques L.) Criterion for the convergence of the solution of the Riccati differential equation. 82m:49023
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- Chyung, D. H. See Bien, Zeungnam, 82a:49016 and 82a:49028
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- Dyhta, V. A. Sufficient conditions for a strong local extremum for optimal control problems with singular states. (Russian) 82c:49012
- Dy Liao, T. E. Mathematical problems in electric power system operation: an overview. 82b:49024
- Elgazzar, S. (with Onyshko, S.) Modified maximum principle for nonlinear open-loop PFM control systems. 82f:49017
- Fujii, Takao. See Suda, Nobuhide, 82f:49022
- Getz, Wayne M. (with Martin, D. H.) Optimal control systems with state variable jump discontinuities. 82j:49020
- Gillis, Paul P. Un problème particulier en théorie du contrôle. 82c:49027
- Gollan, Bernhard. On optimal control problems with state constraints. 82f:49018
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- Irisov, A. E. (with Tonkov, E. L.) Sufficient conditions for the existence and optimality of periodic solutions of differential inclusions. (Russian) 82b:49025
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- Koussioris, Trifon G. (with Bakirtz, A. G.) Optimization and pole placement for a single input controllable system. 82b:49026
- Kremlev, A. G. Control of a second-order system with a large parameter. (Russian) 82f:49019
- Control of a quasilinear system under indeterminate initial conditions. (Russian) 82a:49025
- Krivenkov, Ju. P. Sufficient conditions of optimality in linear problems of the mathematical theory of optimal processes with phase constraints. 82a:49029
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- Mansimov, K. B. On the relation between two necessary conditions for optimality. (Russian. Azerbaijani and English summaries) 82m:49025
- Mardanov, M. D. (with Melikov, T. K.) On necessary optimality conditions in systems with lag. (Russian. Azerbaijani and English summaries) 82g:49015
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- Melikov, T. K. See Mardanov, M. D., 82g:49015
- Onyshko, S. See Elgazzar, S., 82f:49017
- Orlov, A. G. (with Rasina, I. V.) Complex processes and sufficient conditions of relative optimality. (Russian) 82b:49027
- Rasina, I. V. See Orlov, A. G., 82b:49027
- Šablinskaja, I. R. See Timošina, I. R., 82a:49027
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- Silin, D. B. On variation and Riemann integrability of optimal control in linear systems. (Russian) 82g:49016
- Skorodinskii, I. T. A necessary condition for optimality of singular controls. (Russian) 82f:49021
- Soong, T. T. See Chang, Min I. J., 82c:49011
- Suda, Nobuhide (with Fujii, Takao) The optimality property of an optimal regulator incorporating an observer. 82f:49022
- Timošina, I. R. (with Šablinskaja, I. R.) A method for solving a nonsmooth problem based on a necessary integral condition of the extremum. (Russian. English summary) 82a:49027
- Tonkov, E. L. See Irisov, A. E., 82b:49025
- Willems, Jacques L. See Callier, Frank M., 82m:49023
- Žermolenko, V. N. (with González Mastrapa, H.) On the limit cycle in the problem of maximal deviation of a second-order system. (Spanish) 82a:49030
- secondary classifications:
- Ahiev, S. S. Necessary conditions for optimality for systems of functional-differential equations. (Russian) (82c:34092)
- Bacciotti, Andrea. Linear systems with piecewise constant controls. (Italian summary) (82b:49056)
- Cichocki, K. Application of augmented Lagrangians in dynamic planning models. (82j:90013)
- Faminskaja, M. V. See Vasil'eva, A. B., (82j:49002)
- Gani, N. Note corrective à: "Application à la théorie de la commande optimale. II" [Rev. CETHEDC No. 55 (1978), 63-76; MR 80c:93058]. (82j:93021)
- Gurtin, Morton E. (with Murphy, Lea F.) On the optimal harvesting of age-structured populations: some simple models. (82i:92024)
- Janin, R. (with Sentis, Rémi) Existence of an optimal feedback control in a control problem. (82a:34078)
- Jezevski, Donald. Primer vector theory applied to the linear relative-motion equations. (82b:70009)
- Knobloch, H. W. Higher order necessary conditions in optimal control theory. (82g:49035)
- Mansimov, K. B. Optimality of singular (in the classical sense) controls in systems with lag. (Russian. Azerbaijani and English summaries) (82b:49034)
- Mordukhovič, B. Š. Metric approximations and necessary conditions for optimality for general classes of nonsmooth extremal problems. (Russian) (82b:90104)
- Murphy, Lea F. See Gurtin, Morton E., (82i:92024)
- Novoselov, V. S. Algorithmization of the asymptotic theory of optimization of two-impulse transfer. (Russian) (82f:70017)
- Sentis, Rémi. See Janin, R., (82a:34078)
- Vasil'eva, A. B. (with Faminskaja, M. V.) Investigation of a nonlinear optimal control problem by the method of the theory of singular perturbations. (Russian) (82j:49002)
- Wan, Bai Wu. See Wang, Huan Chen, (82a:92057)
- Wang, Huan Chen (with Wan, Bai Wu) Two transformed forms of population models. (Chinese. English summary) (82a:92057)
- 49B21 Free problems in two or more independent variables**
- Acker, Andrew. Concerning Daniljuk's existence theorem for free boundary value problems with the Bernoulli condition. 82b:49028
- Mikolajczyk, L. (with Walczak, S.) Application of the extremum principle to investigating certain extremal problems. 82b:49015
- Walczak, S. See Mikolajczyk, L., 82b:49015
- secondary classifications:
- Henri, Dominique. Nonuniqueness of solutions in the calculus of variations: a geometric approach. (82i:49020)
- 49B22 Problems involving partial differential equations, optimal control**
- Barbu, Viorel. Necessary conditions for nonconvex distributed control problems governed by elliptic variational inequalities. 82m:49026
- Butkovskii, A. G. (with Pustynnikova, E. I.) Theory of mobile control of distributed parameter systems. 82m:49027
- Christensen, G. S. See Nieva, R., 82m:49029
- Curkov, V. I. Decomposition in optimization of systems with elliptic equations. (Russian) 82a:49028
- Fond, S. A dynamic programming approach to the maximum principle of distributed-parameter systems. 82a:49031
- Klink, Helge-Karsten. Über komplexe Methoden in der Kontrolltheorie: ein Dirichlet-Problem. 82a:49029
- Kotarski, Wiesław (with Kowalewski, Adam) On application of conical approximations to an optimal control problem for parabolic systems. (Polish summary) 82m:49028
- Kowalewski, Adam. See Kotarski, Wiesław, 82m:49028
- Kuliev, G. F. Necessary conditions for optimality in systems of hyperbolic equations with control in the coefficients, multiplying derivatives. (Russian) 82b:49016
- Lions, Jacques-Louis. A short report on the optimal control of distributed systems. 82j:49021
- Luk'janov, A. T. (with Neronov, V. S.) ★Принцип максимума для одномерных параболическо-гиперболических систем. (Russian) [A maximum principle for one-dimensional parabolic-hyperbolic systems] 82b:49029
- Mackenthro, Uwe. Some general considerations on optimality conditions for state constrained parabolic control problems. 82a:49031

- Optimalitätsbedingungen und Dualität bei zustandsrestringierten parabolischen Kontrollproblemen. (English and Russian summaries) **82c:49030**
- Neronov, V. S. See Luk'janov, A. T., **82b:49029**
- Nieva, R. (with Christensen, G. S.) Optimal control of distributed nuclear reactors using functional analysis. **82m:49029**
- Niezgodka, Marek (with Pawlow, Irena) Optimal control for parabolic systems with free boundaries. Existence of optimal controls, approximation results. **82c:49032**
- Pawlow, Irena See Niezgodka, Marek, **82c:49032**
- Pulvirenti, Giuseppe (with Santagati, Giuseppe) A minimum problem relative to a control process with distributed parameters. (Italian) **82g:49017**
- Pustyl'nikova, E. I. See Butkovskii, A. G., **82m:49027**
- Reid, D. W. (with Teo, K. L.) Optimal parameter selection of parabolic systems. **82c:49013**
- Santagati, Giuseppe See Pulvirenti, Giuseppe, **82g:49017**
- Sohin, A. S. Some problems of optimal control for a nonlinear control system described by an oscillation equation. (Russian) **82c:49033**
- Teo, K. L. See Reid, D. W., **82c:49013**
- White, L. W. Control problems governed by Sobolev partial differential equations. **82g:49018**

secondary classifications:

- Albul, A. V. (with Banichuk, N. V.; Barsuk, A. A.) Optimization of stability of elastic rods under thermal loads. (**82a:73042**)
- Anzellotti, Gabriele (with Giaquinta, Mariano) Existence of the displacement field for an elastoplastic body subject to Hencky's law and von Mises yield condition. (**82a:73018**)
- Baier, Horst J. Mathematical programming in engineering design problems. (**82c:49024**)
- Banichuk, N. V. See Albul, A. V.; et al., (**82a:73042**)
- Barbu, Viorel (with Da Prato, G.) Existence and approximation for stationary Hamilton-Jacobi equations. (**82c:49040**)
- Barsuk, A. A. See Albul, A. V.; et al., (**82a:73042**)
- Beklarjan, A. A. A maximum principle in the solution of optimal harvesting problems. (Russian) (**82b:92031**)
- Čerkaev, A. V. See Olhoff, Niels; et al., (**82f:73035**)
- Da Prato, G. See Barbu, Viorel, (**82c:49040**)
- Evers, A. H. Sensitivity analysis of a parabolic optimal control problem. (**82c:49039**)
- Fedorov, A. V. See Olhoff, Niels; et al., (**82f:73035**)
- Gaudefroy, Alain Exemples d'atténuation active de l'énergie acoustique au moyen de sources monopolaires voisines d'une source primaire ponctuelle. (English summary) (**82a:76068**)
- Giaquinta, Mariano See Anzellotti, Gabriele, (**82a:73018**)
- Gierliński, J. (with Mróz, Zenon) Optimal design of elastic plates and beams taking large deflections and shear forces into account. (**82g:73039**)
- Glashoff, Klaus Restricted approximation by strongly sign-regular kernels: the finite bang-bang principle. (**82c:41027**)
- Iskenderov, A. D. (with Tagiev, R. K.) Optimization problems with controls in the coefficients of nonstationary quasilinear equations. (Russian. Azerbaijani and English summaries) (**82m:49005**)
- de Jong, G. de Josselin A limit theorem for soils. (**82b:73051**)
- Junusov, M. K. Limits of the application of a chemical method of pest control. (Russian. Tajiki summary) (**82m:92070**)
- Lasiecka, Irena State constrained control problems for parabolic systems: regularity of optimal solutions. (**82b:49004**)
- Le Tallec, P. (with Oden, J. T.) Existence and characterization of hydrostatic pressure in finite deformations of incompressible elastic bodies. (**82c:73034**)
- Lobo-Hidalgo, M. See Sánchez-Palencia, Enrique, (**82b:35017**)
- Lur'e, K. A. See Olhoff, Niels; et al., (**82f:73035**)
- Mróz, Zenon See Gierliński, J., (**82g:73039**)
- Oden, J. T. See Le Tallec, P., (**82c:73034**)
- Olhoff, Niels (with Lur'e, K. A.; Čerkaev, A. V.; Fedorov, A. V.) Sliding regimes and anisotropy in optimal design of vibrating axisymmetric plates. (**82f:73035**)
- Samsonov, A. M. Necessary optimality conditions for stiffness distribution of a rib on an elastic plate. (**82j:73059**)
- Sánchez-Palencia, Enrique (with Lobo-Hidalgo, M.) Perturbation of spectral properties for a class of stiff problems. (**82b:35017**)
- Tagiev, R. K. See Iskenderov, A. D., (**82m:49005**)
- di Vincenzo, R. On the complete controllability of material system governed by a third-order linear equation of hyperbolic type. (Italian. English summary) (**82g:49006**)

49B27 Problems in abstract spaces

- Caligaris, Ottavio (with Oliva, Pietro) Necessary and sufficient conditions for Pareto problems. (Italian summary) **82j:49022**
- Chan, W. L. (with Ng, S. K.) Minimum principle for systems with boundary conditions and cost having Stieltjes-type integrals. **82k:49032**
- Craven, B. D. (with Mond, B.) Lagrangean conditions for quasidifferentiable optimization. **82a:49028**
- Dmitruk, A. V. A Jacobi-type condition for the nonnegativity of a quadratic form on a finitely-faced cone. (Russian) **82m:49030**
- Dolecki, Szymon A general theory of necessary optimality conditions. **82b:49030**
- Gähler, Siegfried Über notwendige Optimalitätsbedingungen in der Polyoptimierung. **82c:49019**
- Garkus, V. I. An approach to the solution of ill-posed problems of control theory in generalized spaces. (Russian) **82m:49031**
- Gollan, Bernhard Higher order necessary conditions for an abstract optimization problem. **82a:49018**
- Jakovleva, A. P. Discrete maximum principle for systems with delay. (Russian) **82a:49029**
- Le Donne, Attilio (with Marchi, Maria Vittoria) Representation of Lipschitzian compact-convex valued mappings. (Italian summary) **82k:49033**

- Lorentz, Rainer On normality of a special problem of optimal control. **82k:49034**
- Marchi, Maria Vittoria See Le Donne, Attilio, **82k:49033**
- Mond, B. See Craven, B. D., **82a:49028**
- Morris, Robert J. T. Optimization with nonadditive set functions. **82g:49020**
- Ng, S. K. See Chan, W. L., **82k:49032**
- Oliva, Pietro See Caligaris, Ottavio, **82j:49022**
- Pollock, J. (with Pritchard, A. J.) The tracking problem for distributed systems with unbounded control action. **82c:49035**
- Pritchard, A. J. See Pollock, J., **82c:49035**
- Rolewicz, S. On optimal problems described by graph γ -paraconvex multifunctions. **82c:49034**
- Rostamian, Rouben Continuity properties of stationary points of quadratic functionals in Hilbert space. **82m:49032**
- Singer, Ivan A characterization of constant-time linear control systems satisfying the Pontryagin maximum principle. **82d:49019**
- Swartz, Charles A control problem of Rogak and Scott-Thomas. **82k:49036**
- Toland, J. F. A duality principle for nonconvex optimisation and the calculus of variations. **82b:49031**

secondary classifications:

- Dmitruk, A. V. (with Miljutin, A. A.; Osmolovskii, N. P.) Ljusternik's theorem and the theory of the extremum. (Russian) (**82c:58010**)
- Kruger, A. Ja. (with Morduhovich, B. Š.) Extremal points and the Euler equation in nonsmooth optimization problems. (Russian. English summary) (**82b:90127**)
- Lucchetti, R. (with Patrone, F.) A characterization of Tyhonov well-posedness for minimum problems, with applications to variational inequalities. (**82m:49036**)
- Miljutin, A. A. See Dmitruk, A. V.; et al., (**82c:58010**)
- Morduhovich, B. Š. See Kruger, A. Ja., (**82b:90127**)
- Osmolovskii, N. P. See Dmitruk, A. V.; et al., (**82c:58010**)
- Patrone, F. See Lucchetti, R., (**82m:49036**)
- Schäuble, Manfred Anmerkungen zu einem abstrakten Maximumprinzip von Halkin. (English and Russian summaries) (**82d:90113**)

49B34 Problems involving functional relations other than differential equations

- Aleynikova, Z. M. (with Zabello, L. E.) On the investigation of the second variation of functionals along trajectories of discrete systems. (Russian) **82c:49037**
- Ragirova, N. H. The asymptotic behavior of the extremal of a variational problem with a small lag in the argument. (Russian. Azerbaijani and English summaries) **82b:49017**
- Bakke, V. L. Optimal fields for problems with delays. **82c:49014**
- Blagodatskih, V. I. Sufficient conditions for optimality in problems with state constraints. **82c:49038**
- Blanco Sánchez, Ramón See Kirlica, V. P., **82b:49032**
- Gurov, V. M. See Pšeničnyi, B. N., **82c:49035**
- Kirlica, V. P. (with Blanco Sánchez, Ramón) The maximum principle for systems with variable delay with respect to the jump variables. (Spanish) **82b:49032**
- Pachter, M. The linear-quadratic optimal control problem with positive controllers. **82b:49033**
- Pšeničnyi, B. N. (with Gurov, V. M.) On necessary conditions for the extremum on convex differential inclusions with phase constraints. (Russian) **82c:49035**
- Sokolowski, Jan Control in coefficients for parabolic equations. **82c:49036**
- Zabello, L. E. See Aleynikova, Z. M., **82c:49037**

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- Gabasov, R. F. (with Karpuk, V. V.; Kirillova, F. M.) Some control problems for hereditary systems. (**82a:49043**)
- Gurtin, Morton E. (with Murphy, Lea F.) On the optimal harvesting of age-structured populations. (See **82m:92003**)
- Jagubov, M. A. See Otakulov, S., (**82i:34013**)
- Kaganovič, M. I. Approximate effective design and sliding planning. (Estonian and Russian summaries) (**82d:90037**)
- Karpuk, V. V. See Gabasov, R. F.; et al., (**82a:49043**)
- Kirillova, F. M. See Gabasov, R. F.; et al., (**82a:49043**)
- Murphy, Lea F. See Gurtin, Morton E., (See **82m:92003**)
- Otakulov, S. (with Jagubov, M. A.) Some properties of differential inclusions and their applications to optimal control. (Russian. Azerbaijani and English summaries) (**82i:34013**)

49B36 Optimal solutions belonging to restricted classes

- Belikov, S. A. (with Zak, Ju. O.) On a class of optimal control problems with constraints on the phase coordinates. **82c:49037**
- Bradley, John Spurgeon (with Chang, D. C.) Lagrange multipliers for regular and singular problems in the calculus of variations. **82c:49038**
- Chang, D. C. See Bradley, John Spurgeon, **82c:49038**
- Collins, William D. Switching properties of linear time optimal control problems with bounded state constraints. **82m:49033**
- Delfour, M. C. (with Lee, E. B.; Manitius, A.) F -reduction of the operator Riccati equations for hereditary differential systems. **82a:49030**
- Haurie, A. Existence and global asymptotic stability of optimal trajectories for a class of infinite-horizon, nonconvex systems. **82b:49018**
- Jarnik, Jiří Multivalued mappings and Filippov's operation. **82b:49017**
- Kuo, Te Son See Lin, Wei Song; et al., (See **82d:93001**)
- Lee, E. B. See Delfour, M. C.; et al., **82a:49030**
- Lichawski, Kazimierz Time-optimal control for Stieltjes-integral equations. **82f:49023**
- Lin, Wei Song (with Kuo, Te Son; Thaler, George J.) A method of minimum time control for 2nd order linear digital control systems with bounded control signals. (See **82d:93001**)

Mamitov, A. See Delfour, M. C.; et al., 82a:49030

Mansimov, K. B. Optimality of singular (in the classical sense) controls in systems with lag. (Russian. Azerbaijani and English summaries) 82b:49034

Orlov, A. G. (with Rasina, I. V.) Relative optimality of discontinuous and discrete processes with parameters. (Russian) 82b:49035

Rasina, I. V. See Orlov, A. G., 82b:49035

Strel'cov, S. V. On the problem of inversion of necessary conditions for optimality of singular controls. (Russian. English summary) 82b:49024

Thaler, George J. See Lin, Wei Song; et al., (See 82d:93001)

Zak, Ju. O. See Belikov, S. A., 82c:49037

Zolezzi, T. Well-posed optimization problems for integral functionals. 82b:49018

secondary classifications:

Silin, D. B. On variation and Riemann integrability of optimal control in linear systems. (Russian) (82g:49016)

49B40 Minimax problems

Holmáker, K. A property of an autonomous minimax optimal control problem. 82c:49015

secondary classifications:

Kowalik, Jan On properties of extremal controls in a differential game. (Polish. English summary) (82c:90111a)

A property of optimal control in a differential game. (Polish. German summary) (82c:90111b)

Kremlev, A. G. Control of a quasilinear system under indeterminate initial conditions. (Russian) (82a:49025)

Troesch, B. A. Optimization of nested polygons. (82g:52004)

49B50 Sensitivity of optimal solutions in the presence of perturbations

Bijarov, T. Equivalence of the frequency theorems of V. A. Jakubovič and V. M. Popov to a certain variational problem. (Russian) 82g:49021

Bobyřev, N. A. On a problem of Ulam. (Russian) 82i:49019

Bourles, Henri Sur la robustesse des régulateurs linéaires multivariables, optimaux pour une fonctionnelle de coût quadratique. (English summary) [Robustness of multivariable linear regulators optimal for a quadratic cost functional] 82m:49034

Cruz, J. B., Jr. (with Sawan, M. E.) Low-sensitivity optimal feedback control for linear discrete-time systems. 82a:49031

Dončev, Asen L. Efficient estimates of the solutions of perturbed control problems. 82m:49035

Evers, A. H. Sensitivity analysis of a parabolic optimal control problem. 82c:49039

Sensitivity analysis in dynamic optimization. 82f:49025

Gaigori, V. G. (with Pervozvanskii, A. A.) Perturbation method in the optimal control problems. (Russian summary) 82c:49016

Georgescu, Horia Suboptimal feedback for systems with small time constants. 82d:49040

Lucchetti, R. (with Patrone, F.) A characterization of Tyhonov well-posedness for minimum problems, with applications to variational inequalities. 82m:49036

Patrone, F. See Lucchetti, R., 82m:49036

Pervozvanskii, A. A. See Gaigori, V. G., 82c:49016

Sawan, M. E. See Cruz, J. B., Jr., 82a:49031

secondary classifications:

Henri, Dominique Nonuniqueness of solutions in the calculus of variations: a geometric approach. (82i:49020)

Jarník, Jiří Multivalued mappings and Filippov's operation. (82i:49017)

Mal'cev, V. V. Sufficient conditions for ϵ -sensitivity in mathematical programming problems. (82b:90111)

49B60 Optimal stochastic control [See also 93Exx.]

Ashley, Richard Postponed linear approximations and adaptive control with nonquadratic losses. 82f:49026

Haussmann, U. G. A discrete approximation to optimal stochastic controls. 82b:49036

Kolodii, A. M. Optimal control with lag of linear stochastic systems containing an unknown parameter. (Russian) 82c:49017

secondary classifications:

Bakan, G. M. Sufficient conditions for optimality in problems of synthesizing control systems with incomplete information. (Russian) (82b:93048)

Keiviczky, L. (with Kumar, K. S. P.) Multivariable self-tuning regulator with generalized cost-function. (82c:93133)

Kumar, K. S. P. See Keiviczky, L., (82c:93133)

Pragarauskas, H. On Bellman equation for controlled degenerate general stochastic processes. (82i:93096)

Tammella, J. Optimal control of production processes with a complex structure. A model with complete information. (Russian. Estonian and English summaries) (82b:90062a)

Optimal control of production processes with a complex structure. A model with incomplete information. (Russian. Estonian and English summaries) (82b:90062b)

Zinober, A. S. I. Self-adaptive near-optimal control of distributed parameter systems. (82a:93031)

49B99 None of the above, but in this section

Boltjanskii, A. V. Continuity of Bellman functions. (Russian) 82j:49023

Gonzalez de Paz, R. B. Sur un problème d'optimisation de domaine. I. 82j:49024a

Sur un problème d'optimisation de domaine. II. 82j:49024b

Sur un problème d'optimisation de domaine. III. 82j:49024c

Kamo, Hideki (with Sugano, Reiji) Necessary and sufficient conditions for the existence of a Lagrangian. The case of quasilinear field equations. 82c:49018

Mahmudov, E. N. Necessary conditions for an extremum for nonautonomous differential inclusions. (Russian. Azerbaijani and English summaries) 82b:49037

Sugano, Reiji See Kamo, Hideki, 82c:49018

Warga, J. On bounding, interior and covering functions. 82a:49039

Wilson, R. A. An optimal control algorithm for monotonically structured functions. 82c:49041

secondary classifications:

Mayne, D. Q. See Polak, Elijah, (82c:93051)

Nemeth, A. B. The comparison of the Michal-Bastiani and of the Clarke subdifferential. (Romanian summary) (82c:58019)

Polak, Elijah (with Mayne, D. Q.) Design of nonlinear feedback controllers. (82c:93051)

Zelnorovic, V. A. Relativistic models of magnetizable and polarizable media and the energy-momentum tensor of an electromagnetic field. (Russian. English summary) (82g:78008)

49Cxx Carathéodory, Hamilton-Jacobi theories, including dynamic programming [See also 90C39.]

49C05 Free problems and problems involving ordinary differential equations

Abdullaev, N. (with Smirnov, E. Ja.) Analytic construction of discrete optimal regulators. (Russian) 82m:49037

de Acutis, Mimma Asymptotic behaviour for a problem arising in the optimal control theory. 82d:49020

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Denman, Harry H. (with Buch, Lawrence H.) Variational treatment for equations of the Langmuir type. 82g:49022

Hennawi, A. On the variational equations associated with a Lagrangian. 82b:49038

Henri, Dominique Nonuniqueness of solutions in the calculus of variations: a geometric approach. 82c:49020

Jankowski, Wojciech An asymptotic approach to the dynamic optimization of complex cyclic process. 82j:49025

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Smirnov, E. Ja. See Abdullaev, N., 82m:49037

Thibault, Lionel Calcul sous-différentiel et calcul des variations en dimension infinie. 82c:49043

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Cantrijn, Frans (with Sarlet, Willy) Note on symmetries and invariants for second-order ordinary differential equations. (82f:70009)

Conti, Roberto A minimum time problem. (82i:49035)

Eliezer, C. J. See Prince, G. E., (82c:70008)

Gonzalez, Roberto Optimal bang-bang control policies with restrictions of time between switchings. I. (82f:49029)

Lutzky, M. Generalized Ray-Reid systems. (82a:58047)

Nakanishi, Noboru (with Ojima, Izumi) Superalgebras of nonabelian gauge theories in the manifestly-covariant canonical formalism. (82i:81147a)

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Prince, G. E. (with Eliezer, C. J.) On the Lie symmetries of the classical Kepler problem. (82c:70008)

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Barbu, Viorel (with Da Prato, G.) Existence and approximation for stationary Hamilton-Jacobi equations. 82k:49040

Bhutani, O. P. (with Dewanwala, Poornima) Invariance and conservation laws for physical systems. 82j:49026

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Abarbanel, Henry D. I. Classical Hamiltonian perturbation theory without secular terms or small denominators. (82b:70022)

- Abellanas, L. (with Galindo, A.) Conserved densities for linear evolution systems. (82j:58059)
- Atanacković, T. M. On conservation laws for continuous bodies. (German summary) (82b:73001)
- Bruzzo, Ugo (with Pagani, Enrico) Variational methods and the definition of energy in the linearized theory of general relativity. (Italian. English summary) (82g:83005)
- Edelen, Dominic G. B. Aspects of variational arguments in the theory of elasticity: fact and folklore. (82e:73026)
- Ekeland, Ivar (with Lasry, Jean-Michel) Problèmes variationnels non convexes en dualité. (English summary) (82g:58021)
- Galindo, A. See Abellanas, L., (82j:58059)
- Gilson, J. G. A classical basis for quantum mechanics. (82b:81009)
- Guil, F. See Olmedilla, E.; et al., (82j:58065)
- Hasagawa, Takuichi The equation of a vibrating general membrane. (82c:53010)
- Kamimura, Kiyoshi Relativistic string model in differential form. (82b:81134)
- Kastrup, H. A. (with Rinke, M.) Hamilton-Jacobi theories for strings. (82m:81052)
- Kuznetsov, E. N. (with Mikhailov, A. V.) On the topological meaning of canonical Clebsch variables. (82f:58041)
- Langebartel, R. G. Formulation of the restricted three-body problem with two-center problem orbits as intermediate orbits. (82e:70009)
- Lasry, Jean-Michel See Ekeland, Ivar, (82j:58021)
- Lions, Pierre-Louis (with Mercier, Bertrand) Approximation numérique des équations de Hamilton-Jacobi-Bellman. (English summary) (82b:65055)
- Une inégalité pour les opérateurs elliptiques du second ordre. (English summary) [An inequality for second-order elliptic operators] (82k:35051)
- Solutions généralisées des équations de Hamilton-Jacobi du premier ordre. (English summary) [Generalized solutions of first-order Hamilton-Jacobi equations] (82i:35041)
- Llora, Josep (with Marqués, F.; Molina, A.) Predictive extension of a singular Lagrangian system. (82e:70004)
- Maeda, Shigeru Extension of discrete Noether theorem. (82g:70041)
- Marqués, F. See Llora, Josep; et al., (82e:70004)
- Martinez Alonso, L. See Olmedilla, E.; et al., (82j:58065)
- McGuinness, Mark J. Noether's theorem and infinities of polynomial conserved densities. (82f:35167)
- Mercier, Bertrand See Lions, Pierre-Louis, (82b:65055)
- Mikhailov, A. V. See Kuznetsov, E. N., (82f:58041)
- Miles, John W. Hamiltonian formulations for surface waves. (82m:76013)
- Molina, A. See Llora, Josep; et al., (82e:70004)
- Olmedilla, E. (with Martinez Alonso, L.; Guil, F.) Infinite-dimensional Hamiltonian systems associated with matrix Schrödinger operators. (Italian and Russian summaries) (82j:58065)
- Olver, Peter J. (with Shakiban, Chehrzad) A resolution of the Euler operator. I. (82i:13028)
- Pagani, Enrico See Bruzzo, Ugo, (82g:83005)
- Rinke, M. See Kastrup, H. A., (82m:81052)
- Shakiban, Chehrzad A resolution of the Euler operator. II. (82i:13029)
- See also Olver, Peter J., (82i:13028)
- Šuruga, A. V. Method of collective variables and generalized Hamiltonian formalism. (Russian. English summary) (82b:81149)
- Yasuda, Hiroshi On Finsler geometry and analytical dynamics. (82f:53044)

49C15 Problems in abstract spaces or involving functional relations other than differential equations

- Johnson, Timothy L. See Singh, Ram-Nandan P., 82e:49044
- Singh, Ram-Nandan P. (with Johnson, Timothy L.) A functional expansion approach to the solution of nonlinear feedback problems. 82e:49044

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- Abellanas, L. (with Galindo, A.) Quasi-Lagrangian systems. (82b:35004)
- Bakke, V. L. Optimal fields for problems with delays. (82c:49014)
- Carpenter, Stephen R. Decay of heterogeneous detritus: a general model. (82f:92041)
- Dmitruk, A. V. A Jacobi-type condition for the nonnegativity of a quadratic form on a finitely-faced cone. (Russian) (82m:49030)
- Galindo, A. See Abellanas, L., (82b:35004)
- Ray, John R. Invariants for nonlinear equations of motion. (82g:70043)
- Zhu, Dong Pei Representation matching and the gauge invariant energy-momentum tensor. (82d:81116)

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- Casti, John L. On the general inverse problem of optimal control theory. 82i:49022
- Dixon, L. C. W. (with Szegő, G. P.) The numerical optimisation of dynamic systems: a survey. 82h:49019
- (Faure, Robert) See Laurière, Jean-Louis, 82g:49024
- Fawzy, Ahmed S. (with Hinton, O. R.; Hanna, F. K.) A four-level hierarchical approach to the joint problem of system identification and optimization and its application to a batch fermenter using microprocessors. 82g:49023a
- Hierarchical optimization of nonlinear dynamical systems with nonquadratic objective functions. 82g:49023b
- Friedman, Avner (with Lions, Pierre-Louis) Corrigendum: "The optimal strategy in the control problem associated with the Hamilton-Jacobi-Bellman equation" [SIAM J. Control Optim. 18 (1980), no. 2, 191-198; MR 81m:49029]. 82m:49038
- Gonzalez, Roberto Optimal bang-bang control policies with restrictions of time between switchings. I. 82i:49029
- Hanna, F. K. See Fawzy, Ahmed S.; et al., 82g:49023a
- Hassan, Mohammed F. (with Tili, A.; Singh, Madan G.; Hurteau, R.) Stability, stabilisation and performance of multilevel controllers under structural perturbations.

- I. Cutting the links between coordinator and subsystems. 82b:49039a
- (with Singh, Madan G.) Stability, stabilisation and performance of multilevel controllers under structural perturbations. II. Stabilisation under any structural perturbation. 82b:49039b

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- Hinton, O. R. See Fawzy, Ahmed S.; et al., 82g:49023a
- Hurteau, R. See Hassan, Mohammed F.; et al., 82b:49039a
- Iwamoto, Seiichi Reversed control processes. 82f:49030
- Kas'janov, V. A. (with Udarcov, E. P.) Optimal implicit algorithms for identifying dynamical and statistical objects. (Russian) 82d:49023
- Laurière, Jean-Louis ★Éléments de programmation dynamique. (French) [Elements of dynamic programming] 82g:49024
- Lions, Pierre-Louis See Friedman, Avner, 82m:49038
- Mahmoud, Magdi S. (with Hassan, Mohammed F.; Singh, Madan G.) A new hierarchical approach to the joint problem of systems identification and optimization. 82i:49023
- Morozan, T. Dynamic programming for some discrete-time control systems with random perturbations. 82b:49040
- Ng, K. Y. K. (with Sancho, N. G. F.) Dynamic programming algorithm for optimizing distributed parameter trajectories with constraints. 82e:49024
- Propoi, A. I. Dynamic linear programming. 82e:49045
- Sakawa, Yoshiyuki (with Shindo, Yuji) On global convergence of an algorithm for optimal control. 82e:49046
- Sancho, N. G. F. See Ng, K. Y. K., 82e:49024
- Shindo, Yuji See Sakawa, Yoshiyuki, 82e:49046
- Singh, Madan G. See Hassan, Mohammed F.; et al., 82b:49039 and Mahmoud, Magdi S.; et al., 82i:49023
- Szegő, G. P. See Dixon, L. C. W., 82h:49019
- Tili, A. See Hassan, Mohammed F.; et al., 82b:49039a
- Trykin, Ju. V. Smoothness of the Bellman function. (Russian. English summary) 82g:49025
- Udarcov, E. P. See Kas'janov, V. A., 82d:49023

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- Cooper, Leon (with Cooper, Mary W.) ★Introduction to dynamic programming. (82m:90153)
- Cooper, Mary W. See Cooper, Leon, (82m:90153)
- Fedorov, V. V. See Krasnoshekov, P. S.; et al., (82c:73062)
- Fond, S. A dynamic programming approach to the maximum principle of distributed-parameter systems. (82k:49031)
- Hausmann, U. G. On the adjoint process for optimal control of diffusion processes. (82i:49012a)
- Erratum: "On the adjoint process for optimal control of diffusion processes" [SIAM J. Control Optim. 19 (1981), no. 2, 221-243]. (82i:49012b)
- Krasnoshekov, P. S. (with Morozov, V. V.; Fedorov, V. V.) Sequential clustering in internal design problems of engineering systems. (82c:73062)
- Morozov, V. V. See Krasnoshekov, P. S.; et al., (82c:73062)
- Swan, George W. Optimal control applications in biomedical engineering—a survey. (82m:92016)

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- Lutsky, M. Origin of non-Noether invariants. 82c:49021

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- Andrade, R. F. S. (with Rauh, A.) The Lorenz model and the method of Carleman embedding. (82g:58049)
- Benenti, Sergio Separability structures on Riemannian manifolds. (82e:70015)
- Biran, B. Carathéodory's canonical field equations. (82c:81166)
- Bolotin, S. V. (with Kozlov, V. V.) Asymptotic solutions of the equations of dynamics. (Russian. English summary) (82c:70024)
- Cantrijn, Frans See Sarlet, Willy, (82e:70018)
- Cawley, Robert Gauge invariance and the Helmholtz conditions. (82h:70019)
- Depret, André Intrinsic variational equations in three dimensions. (82h:70010)
- Dorfman, I. Ja. See Gel'fand, I. M., (82j:58045)
- Gel'fand, I. M. (with Dorfman, I. Ja.) Hamiltonian operators and infinite-dimensional Lie algebras. (Russian) (82j:58045)
- Giammoni, M. J. Variational derivation of the adiabatic time-dependent Hartree-Fock formalism and generalized Hamiltonian dynamics. (82b:81156)
- Kozlov, V. V. See Bolotin, S. V., (82c:70024)
- Polak, L. S. (with Vizin, V. P.) Noether's theorem in the history of physics. (Russian. English summary) (82c:70001)
- Rauh, A. See Andrade, R. F. S., (82g:58049)
- Ray, John R. (with Reid, James L.) Noether's theorem and Ermakov systems for nonlinear equations of motion. (82c:70025)
- Reid, James L. See Ray, John R., (82c:70025)
- Sarlet, Willy (with Cantrijn, Frans) Higher-order Noether symmetries and constants of the motion. (82e:70018)
- Shadwick, William F. The Hamilton Cartan formalism for r th-order Lagrangians and the integrability of the KdV and modified KdV equations. (82k:81051)
- Thimm, Anton ★Über die Integrabilität geodätischer Flüsse auf homogenen Räumen. (German) [On the integrability of geodesic flows on homogeneous spaces] (82m:58033)
- Vizin, V. P. See Polak, L. S., (82c:70001)
- Yasue, Kunio Stochastic calculus of variations. (82g:60086)

49Dxx Methods of successive approximations (For discrete problems, see 90Cxx; see also 65Kxx.)

- Gemintern, V. I. (with Kagan, B. M.) ★Методы оптимального проектирования.

(Russian) [Methods for optimal design] 82g:49026

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Oganesjan, L. A. (with Ruhovec, L. A.) ★Вариационно-разностные методы решения эллиптических уравнений. (Russian) [Variation-difference methods for solving elliptic equations] (82m:65105)

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Kovács, Margit A continuous method for the nonlinear programming problem with equality constraints. 82e:49047

Liskovec, O. A. Consistency of discretization in the quasisolution method for ill-posed extremal problems. (Russian. English summary) 82a:49032

Naidu, D. S. See Rajagopalan, P. K., 82a:49024

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Shamaly, A. (with Christensen, G. S.; El-Hawary, M. E.) Solution of ill-conditioned optimality conditions for control of turbo-alternators. 82a:49033

Sroćko, V. A. On the solution of optimal control problems with phase inequality-constraints on the right end. (Russian) 82e:49025

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Caprini, I. General method of using positivity in analytic continuations. (French summary) (82j:32029)

Elgazzar, S. (with Onyshko, S.) Modified maximum principle for nonlinear open-loop PFM control systems. (82f:49017)

Kunisch, Karl ★Approximation of optimal control problems for nonlinear hereditary systems of neutral type. (82j:34078)

Onyshko, S. See Elgazzar, S., (82f:49017)

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Gerencsér, L. On a stabilization method of Miele (convergence and applications). 82g:49027

Gluškov, O. V. Stochastic method of linearization for minimization of maximum functions. (Russian) 82m:49039

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Kurcyusz, Stanisław (with Majchrzak, Janusz) Morrison-type algorithms for constrained optimization. I. 82m:49040a

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Lichnerowicz, A. Une méthode de gradient conjugué sur des variétés application à certains problèmes de valeurs propres non linéaires. (English summary) 82b:49041

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Metzler, James A. (with Fried, Isaac) The conjugate gradient method with finite elements. 82e:49049

Miele, A. (with Liu, C. T.) Supplementary optimality properties of gradient-restoration algorithms for optimal control problems. 82d:49025

Nurminskii, E. A. On ϵ -subgradient methods of nondifferentiable optimization. 82b:49042

secondary classifications:

Čurkov, V. I. An iterative method of decomposition for extremum problems. (Russian) (82a:90134)

Degtjarev, O. V. (with Evstifeev, V. V.) Modification of algorithms of parameter adjustment in gradient self-adjusting systems with reference models. (82f:93041)

Desrochers, A. A. Design and analysis of successive approximation algorithms via bilinear control theory. (82i:90092)

Evstifeev, V. V. See Degtjarev, O. V., (82f:93041)

Hornung, Roland Algorithms for the solution of a discrete minimax problem: subgradient methods and a new fast Newton method. (82a:90117)

Reid, D. W. (with Teo, K. L.) Optimal parameter selection of parabolic systems. (82e:49013)

Teo, K. L. See Reid, D. W., (82e:49013)

Želichovskii, A. A. A method of projections of ϵ -quasigradients. (Russian) (82a:90127)

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Boičuk, L. M. Method of computing the optimal control of linear discrete systems in the presence of constraints using an orthogonalization procedure. (Russian) 82d:49026

Burger, Jacques See Geisz, Walter, 82a:49034

Geisz, Walter (with Burger, Jacques) Estimation d'état dans un système à paramètres répartis de type parabolique. (English summary) 82a:49034

Golubev, I. I. On a method for the approximate solution of optimal control problems. (Russian) 82b:49043

Johnson, G. E. (with Townsend, M. A.) A generalized direct search acceptable-point technique for use with descent-type multivariate algorithms. 82b:49044

Kęcki, E. (with Woźniakowski, M.) On the simulation methodology and its implementation for optimization by Ritz procedure. 82a:49035

Lee, Gordon K. F. Single input, multi-output linear regulators using constant output feedback. (See 82d:93001)

Malivert, Christian Méthode de descente sur un fermé non convexe. 82a:49036

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secondary classifications:

Barta, J. Lower and upper bounds for the torsional rigidity of an elastic prismatic bar whose ends are rigid. (82b:73005)

Čečkin, A. V. Method of linear regularization. (Russian) (82g:47009)

Chaney, Robin W. (with Goldstein, A. A.) On directions of ϵ -steepest descent for real-valued Lipschitz continuous functions. (82i:90091)

Cohen, A. I. Stepsize analysis for descent methods. (82j:65039)

Goldstein, A. A. See Chaney, Robin W., (82j:90091)

Herrera, Ismael Boundary methods: a criterion for completeness. (82a:45020)

Ho, Hwa Shan Bending of thin elastic plates with arbitrary geometry and boundary conditions. (82d:73044)

Kim, Seung Woo (with Kwak, Byung Man) Optimal design of damped dynamic structures. (82m:73059)

Kravčuk, A. S. Formulation of the problem of contact between several deformable bodies as a nonlinear programming problem. (82m:73072)

Kwak, Byung Man See Kim, Seung Woo, (82m:73059)

Litvinov, V. G. A modification of the Ritz method for variational equations and its applications to boundary value problems with mixed boundary conditions. (Russian) (82f:73046)

Neuberger, John W. Finite-dimensional potential theory applied to numerical analysis of linear systems. (82j:65080)

Sloboda, Fridrich A generalized conjugate gradient algorithm for minimization. (82c:65041)

Thomas, G. The consistence error of extended variational principles in the finite element method. (82d:65141)

Žuk, P. F. Asymptotic properties of the method of steepest descent in eigenvalue problems. (Russian) (82j:65023)

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Ho, H. S. (with Blatz, P. J.) Variational theorems and stepwise mean convergence of approximations to selfadjoint linear systems by general finite sums. (German summary) 82m:49041

Mathis, F. H. An L_∞ error estimate for the Ritz-Trefftz approximation in optimal control. 82i:49028

Mayorga, R. V. (with Quintana, V. H.) A family of variable metric methods in function space, without exact line searches. 82i:49029

Milani, Basilio E. A. On the computation of the optimal constant output feedback gains for large-scale linear time-invariant systems subjected to control structure constraints. 82g:49028

Quintana, V. H. See Mayorga, R. V., 82i:49029

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Straubel, R. (with Sydow, A.) Distributed system simulation by multilevel optimal control. 82a:49037

Sydow, A. See Straubel, R., 82a:49037

secondary classifications:

Arhipova, E. S. See Rvačov, V. L.; et al., (82m:80003)

Hlaváček, Ivan See Nečas, Jindřich, (82h:73002)

Janovský, Vladimír (with Procházka, Petr) Contact problem of two elastic bodies. I, II, III. (Russian and Slovak summaries) (82h:73053)

Jirousek, J. A family of variable section curved beam and thick-shell or membrane-stiffening isoparametric elements. (82h:73039)

Khosla, P. K. (with Rubin, S. G.) Applications of a variational method for mixed differential equations. (82h:76030)

Ladevèze, Jean Méthode du taux de déformation isochorique artificiel pour la résolution du problème de Stokes stationnaire pour certains fluides simples proprement dits incompressibles. (English summary) (82g:76003)

Nečas, Jindřich (with Hlaváček, Ivan) ★Mathematical theory of elastic and elastoplastic bodies: an introduction. (82h:73002)

Nedeljković, Nikola B. New algorithms for unconstrained nonlinear optimal control problems. (82m:65057)

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Rubin, S. G. See Khosla, P. K., (82h:76030)

Rvačov, V. L. (with Slesarenko, A. P.; Arhipova, E. S.) Calculation of the temperature field in a doubly connected cylinder of complex cross section. (Russian) (82m:80003)

Slesarenko, A. P. See Rvačov, V. L.; et al., (82m:80003)

49D20 Methods of relaxation type

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Miellou, J. C. See Lhote, F.; et al., 82h:49045

- Papageorgiou, M. (with Schmidt, Gunther) On the hierarchical solution of nonlinear optimal control problems. **82m:49042**
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 Spiteri, P. See Lhote, F.; et al., **82b:49045**

secondary classifications:

- Cruz, J. B., Jr. On order reduction for models of Nash and Stackelberg differential games. (See **82e:94002**)
 Sidorov, N. A. (with Trenogin, V. A.) Regularization of linear controls on the basis of perturbation theory. (Russian) (**82a:47011**)
 Trenogin, V. A. See Sidorov, N. A., (**82a:47011**)

49D25 Finite difference methods

- Alexandru, Vasilescu Approximations pour les solutions des systèmes de contrôle optimal. **82h:49021**
 Dončev, Asen L. Error estimates for a discrete approximation to constrained control problems. **82c:49022**
 Ellis, J. E. (with Roberts, P. D.) Simple models for integrated optimization and parameter estimation. **82f:49032**
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 Hackbusch, Wolfgang Fast solution of elliptic control problems. **82i:49030**
 Ismuhametov, A. Z. (with Potapov, M. M.) On the concordance of a regularization parameter with a step of difference mesh. (Russian) **82m:49043**
 Luenberger, David G. Nonlinear descriptor variable systems. **82k:49041**
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 Potapov, M. M. See Ismuhametov, A. Z., **82m:49043**
 Rajagopalan, P. K. (with Naidu, D. S.) Singular-perturbation method for discrete models of continuous systems in optimal control. **82m:49044**
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 Taševa, Bistra E. See Zlatev, Minčo P., **82d:49027**
 Vörös, T. See Gyurkovics, Éva, **82f:49033**
 Zinober, A. S. I. Self-adaptive near-optimal control of diffusion equations. **82h:49022**
 Zlatev, Minčo P. (with Taševa, Bistra E.) The functional linearization method. Realized possibilities. (Bulgarian. Russian and English summaries) **82d:49027**

secondary classifications:

- Athel, S. A. (with El Naschie, M. S.) A discrete solution for nonlinear eigenvalue problems. (**82d:58019**)
 Bauer, Frances (with Betancourt, O.; Garabedian, P.) Nonlinear magnetohydrodynamic stability. (**82a:76036**)
 Betancourt, O. See Bauer, Frances; et al., (**82a:76036**)
 El Naschie, M. S. See Athel, S. A., (**82d:58019**)
 Garabedian, P. See Bauer, Frances; et al., (**82a:76036**)
 Mihlin, S. G. Constant multipliers in the estimates of the error of the variational difference approximation. (Russian) (**82j:65008**)
 Taubert, K. Converging multistep methods for initial value problems involving multivalued maps. (German summary) (**82m:65068**)
 Weinelt, W. Net approximation of variational inequalities. (Russian) (**82b:65056**)

49D27 Decomposition methods

- Boreckii, I. F. (with Pavlov, V. G.) Uniqueness of decomposition in the linear optimal control problem with a quadratic performance criterion. **82b:49046**
 Gomulka, J. Decomposition algorithms for smooth unconstrained optimisation problems. **82d:49028**
 Gössel, Michael See Tai, N. D.; et al., **82b:49047**
 Kaneko, Hideaki (with Ruckle, William H.) Schauder decompositions, approximations and control problems. **82i:49031**
 Pavlov, V. G. See Boreckii, I. F., **82b:49046**
 Ruckle, William H. See Kaneko, Hideaki, **82i:49031**
 Straubel, R. See Tai, N. D.; et al., **82b:49047**
 Tai, N. D. (with Gössel, Michael; Straubel, R.) On decomposition methods of large-scale systems for optimization problems. **82b:49047**
 Tatjewski, Piotr Methods of hierarchical optimization for interconnected systems. **82b:49048**

secondary classifications:

- Bailey, F. N. See Findeisen, Władysław; et al., (**82b:93001**)
 Brdys, M. See Findeisen, Władysław; et al., (**82b:93001**)
 Findeisen, Władysław (with Bailey, F. N.; Brdys, M.; Malinowski, K.; Tatjewski, Piotr; Wozniak, A.) ★Control and coordination in hierarchical systems. (**82b:93001**)
 Hamdi, Mohamed Ali Une formulation variationnelle par équations intégrales pour la résolution de l'équation de Helmholtz avec des conditions aux limites mixtes. (English summary) [Variational formulation by integral equations for solving the Helmholtz equation with mixed boundary conditions] (**82c:35027**)
 Komogorov, V. V. (with Mednickii, V. G.; Vasenkova, N. V.) A convex programming problem with separable variables. (Russian) (**82b:90090**)
 Lang, B. See Lhote, F.; et al., (**82b:49045**)
 Lhote, F. (with Lang, B.; Miellou, J. C.; Spiteri, P.) Relaxation methods for parallel in line calculations of the optimum control of large systems. (**82b:49045**)
 Malinowski, K. See Findeisen, Władysław; et al., (**82b:93001**)
 Mednickii, V. G. See Komogorov, V. V.; et al., (**82b:90090**)
 Miellou, J. C. See Lhote, F.; et al., (**82b:49045**)
 Spiteri, P. See Lhote, F.; et al., (**82b:49045**)
 Stănculescu, Fl. Optimization in conditions of uncertainty of large-scale systems with hierarchical structure and applications. (Romanian. English summary) (**82b:93005**)

- Tatjewski, Piotr See Findeisen, Władysław; et al., (**82b:93001**)
 Vasenkova, N. V. See Komogorov, V. V.; et al., (**82b:90090**)
 Wozniak, A. See Findeisen, Władysław; et al., (**82b:93001**)

49D29 Multiplier methods

- Black, R. Michael (with Smith, Donald R.) The finite topology and variational calculus on nontopological vector spaces. **82f:49034**
 Collins, William D. Dual extremum principles and Hilbert space decompositions. **82b:49049**
 Hakkala, Lauri See Hirvonen, Juhani, **82b:49050**
 Hestenes, Magnus R. Augmentability in optimization theory. **82f:49035**
 Hirvonen, Juhani (with Hakkala, Lauri) A hierarchical approach to state space constrained optimization problems. **82b:49050**
 Shieh, Leang San See Wei, Ying Ji, (**See 82e:94002**)
 Smith, Donald R. See Black, R. Michael, **82f:49034**
 Wei, Ying Ji (with Shieh, Leang San) Synthesis of optimal block controllers for multivariate control systems and its inverse optimal control problem. (**See 82e:94002**)

secondary classifications:

- Colli Franzone, P. (with Magenes, Enrico) On the inverse potential problem of electrocardiology. (**82c:35079**)
 Magenes, Enrico See Colli Franzone, P., (**82c:35079**)
 Phạm Hữu Thích A support principle for a discrete inclusion with a vector-valued criterion function. (**82b:90106**)
 Savageau, Michael A. Accuracy of proofreading with zero energy cost. (**82m:92052**)
 Troianiello, Giovanni M. Unilateral Dirichlet problems of the nonvariational type. (**82b:35052**)

49D30 Other methods, not based on necessary conditions (penalty function, etc.)

- Brunovský, Pavol (with Komorník, Jozef) The Riccati equation solution of the linear-quadratic problem with constrained terminal state. **82i:49032**
 Čičmadze, V. K. Solving dynamic optimal problems by the Ψ -transformation method. **82d:49029**
 Fahmy, Moustafa M. (with Mohamed, I. H.) Comments on: "A new lower bound on the cost of optimal regulators" [IEEE Trans. Automat. Control **24** (1979), no. 2, 353–354; MR **80c:93084a**] by G. Langholz. **82a:49038**
 Fogel, Eli (with McGill, Kevin Charles) Spectral analysis of previewing controllers. **82g:49029**
 Fonarev, A. A. A method for solving monotone variational inequalities. (Russian) **82i:49033**
 Hromova, L. N. See Vasil'ev, F. P.; et al., **82g:49032**
 Itoh, Kunitoku Numerical solution of time optimal control problems by a finite Chebyshev series. I. Computation. **82i:49034a**
 Numerical solution of time optimal control problems by a finite Chebyshev series. II. Numerical solvability. **82i:49034b**
 Numerical solution of time optimal control problems by a finite Chebyshev series. III. Sufficient conditions for a local minimum. **82i:49034c**
 Jačimović, M. D. See Vasil'ev, F. P.; et al., **82g:49032**
 Kawarada, Hideo See Natori, Makoto, **82b:49023**
 Komorník, Jozef See Brunovský, Pavol, **82i:49032**
 Kovács, Margit Convergence of the method of generalized barrier functions. (Russian) **82g:49030**
 See also Vasil'ev, F. P., **82e:49051**
 Khiz, Otakar F. See Outrata, Jiří V., **82b:49051**
 (Langholz, G.) See Fahmy, Moustafa M.; et al., **82a:49038**
 Lasserre, J. B. A globally convergent algorithm for exact penalty functions. **82b:49042**
 Litvinov, V. G. (with Pantelev, A. D.) Optimization problem for plates of variable thickness. **82f:49036**
 Mayne, D. Q. (with Polak, Elijah) An exact penalty function algorithm for optimal control problems with control and terminal equality constraints. I. **82e:49050a**
 (with Polak, Elijah) An exact penalty function algorithm for optimal control problems with control and terminal equality constraints. II. **82e:49050b**
 McGill, Kevin Charles See Fogel, Eli, **82g:49029**
 Mohamed, I. H. See Fahmy, Moustafa M., **82a:49038**
 Naidu, D. S. (with Rajagopalan, P. K.) Singular perturbation method for a closed-loop optimal control problem. **82d:49030**
 Natori, Makoto (with Kawarada, Hideo) An application of the integrated penalty method to free boundary problems of Laplace equation. **82b:49023**
 Outrata, Jiří V. (with Khiz, Otakar F.) An application of conjugate duality for numerical solution of continuous convex optimal control problems. **82b:49051**
 (with Schindler, Z.) An augmented Lagrangian method for a class of convex continuous optimal control problems. (Russian summary) **82m:49045**
 Pantelev, A. D. See Litvinov, V. G., **82f:49036**
 Pikur, É. A. (with Severin, V. P.) Minimization of integral quadratic quality estimates for linear automatic control systems. (Russian) **82c:49023**
 Polak, Elijah See Mayne, D. Q., **82e:49050a** and **82e:49050b**
 Prasad, B. Variable penalty methods for constrained minimization. **82g:49031**
 Rajagopalan, P. K. See Naidu, D. S., **82d:49030**
 Reddy, J. N. A penalty finite element for nonlinear analysis of thin and moderately thick plates. **82a:49039**
 Schindler, Z. See Outrata, Jiří V., **82m:49045**
 Severin, V. P. See Pikur, É. A., **82c:49023**
 Vasil'ev, F. P. (with Kovács, Margit) Regularization of ill-posed extremal problems using penalty functions of a general form. (Russian. English summary) **82e:49051**
 (with Hromova, L. N.; Jačimović, M. D.) Iterative regularization of a third-order minimization method. (Russian) **82g:49032**

White, L. W. Penalty approximation of a Sobolev optimal control problem with state constraints. **82c:49052**

secondary classifications:

- Ando, Yutaka. See Yagawa, G.; et al., (See **82c:73005**)
- Archetti, Francesco. A probabilistic algorithm for global optimization problems with a dimensionality reduction technique. (**82d:90084**)
- Campbell, Stephen L. A procedure for analyzing a class of nonlinear semistate equations that arise in circuit and control problems. (**82a:94090**)
- Ciavaldini, Jean-François (with Pogu, Marc; Tourmenine, Georges) Étude de problèmes monotones posés dans des ouverts non bornés, estimation de l'erreur de troncature. (English summary) (**82b:49010**)
- Forsyth, P., Jr. (with Rasmussen, H.) Comparison of variational inequality and front-tracking solution of an electrochemical machining problem. (**82b:78028**)
- Großmann, Christian (with Kaplan, A. A.) ★Strafmethoden und modifizierte Lagrangefunktionen in der nichtlinearen Optimierung. (German) [Penalty methods and modified Lagrange functions in nonlinear optimization] (**82c:90099**)
- Hirayama, H. See Yagawa, G.; et al., (See **82c:73005**)
- Jentsch, Lothar. Bemerkung zum Castiglianoschen Prinzip. (**82a:73062**)
- Kaplan, A. A. See Großmann, Christian, (**82c:90099**)
- Kikuchi, Noboru (with Song, Young Joon) Penalty/finite-element approximations of a class of unilateral problems in linear elasticity. (**82b:73075**)
- See also Ohtake, K.; et al., (**82c:73047a**) and (**82c:73047b**)
- Kremlev, A. G. Control of a second-order system with a large parameter. (Russian) (**82c:49019**)
- Krzemiński, S. K. Identification of thermal conductivity by the method of penalty function. (See **82g:80001**)
- Kurcusz, Stanisław (with Majchrzak, Janusz) Morrison-type algorithms for constrained optimization. I. (**82m:49040a**)
- (with Majchrzak, Janusz) Morrison-type algorithms for constrained optimization. II. (Polish and Russian summaries) (**82m:49040b**)
- Leżański, T. Sur le minimum des fonctionnelles dans les espaces de Banach. (**82a:90120**)
- Lions, Pierre-Louis (with Mercier, Bertrand) Approximation numérique des équations de Hamilton-Jacobi-Bellman. (English summary) (**82b:65055**)
- Majchrzak, Janusz. See Kurcusz, Stanisław, (**82m:49040a**) and (**82m:49040b**)
- Mercier, Bertrand. See Lions, Pierre-Louis, (**82b:65055**)
- Mjasnikov, V. P. (with Novikov, V. L.; Sazonov, Ju. V.) A direct problem of salt dome modeling. (Russian) (**82b:86007**)
- Nair, G. Gopalakrishnan. A note on: "Optimal control of a class of unconstrained bilinear systems" [Internat. J. Systems Sci. 7 (1976), no. 12, 1349-1354; MR 55 # 10108] by D. Tabak and E. Zager. (**82b:49004**)
- Novikov, V. L. See Mjasnikov, V. P.; et al., (**82b:86007**)
- Oden, J. T. See Ohtake, K.; et al., (**82c:73047a**) and (**82c:73047b**)
- Ohtake, K. (with Oden, J. T.; Kikuchi, Noboru) Analysis of certain unilateral problems in von Kármán plate theory by a penalty method. I. A variational principle with penalty. (**82c:73047a**)
- (with Oden, J. T.; Kikuchi, Noboru) Analysis of certain unilateral problems in von Kármán plate theory by a penalty method. II. Approximation and numerical analysis. (**82c:73047b**)
- Pogu, Marc. See Ciavaldini, Jean-François; et al., (**82b:49010**)
- Rasmussen, H. See Forsyth, P., Jr., (**82b:78028**)
- Sazonov, Ju. V. See Mjasnikov, V. P.; et al., (**82b:86007**)
- Schatzman, Michelle. The penalty method for the vibrating string with an obstacle. (**82i:35124**)
- Song, Young Joon. See Kikuchi, Noboru, (**82b:73075**)
- (Tabak, D.) See Nair, G. Gopalakrishnan, (**82b:49004**)
- Tourmenine, Georges. See Ciavaldini, Jean-François; et al., (**82b:49010**)
- Turcam, Angela. Some applications of duality. (**82g:90075**)
- Yagawa, G. (with Hirayama, H.; Ando, Yutaka) Contact analysis in crack mechanics using penalty function method. (See **82c:73005**)
- (Zager, E.) See Nair, G. Gopalakrishnan, (**82b:49004**)

49D35 Methods of linear programming type

- Dantzig, G. B. (with Sethi, Suresh P.) Linear optimal control problems and generalized linear programs. **82g:49033**
- Sethi, Suresh P. See Dantzig, G. B., **82g:49033**

secondary classifications:

- Coleman, Bernard D. (with Duffin, Richard J.; Knowles, Gregory P.) A class of optimal design problems with linear inequality constraints. (Italian summary) (**82k:73059**)
- Dixon, L. C. W. (with Szegő, G. P.) The numerical optimisation of dynamic systems: a survey. (**82b:49019**)
- Duffin, Richard J. See Coleman, Bernard D.; et al., (**82k:73059**)
- Gabasov, R. F. (with Kirillova, F. M.; Kostjukova, O. I.) On the construction of first-order algorithms for solving optimal control problems. (Russian) (**82b:90073**)
- Kirillova, F. M. See Gabasov, R. F.; et al., (**82b:90073**)
- Kjazyrov, D. K. See Veliev, M. A., (**82c:65084**)
- Knowles, Gregory P. See Coleman, Bernard D.; et al., (**82k:73059**)
- Kostjukova, O. I. See Gabasov, R. F.; et al., (**82b:90073**)
- Kraft, D. Finite-difference gradients versus error-quadrature gradients in the solution of parameterized optimal control problems. (**82d:90108**)
- Rikards, R. B. Convexity of some classes of optimization problems for multilayer shells under conditions of stability and vibration. (**82b:73044**)
- Szegő, G. P. See Dixon, L. C. W., (**82b:49019**)
- Veliev, M. A. (with Kjazyrov, D. K.) Approximate solution of a Goursat problem for degenerate linear hyperbolic equations. (Russian. Azerbaijani and English summaries) (**82c:65084**)

49D37 Nonlinear programming

- Baier, Horst J. Mathematical programming in engineering design problems. **82c:49024**
- Bazaraa, Mokhtar S. (with Sherali, Hanif D.) On the choice of step size in subgradient optimization. **82c:49043**
- Coleman, T. F. (with Conn, Andrew R.) Second-order conditions for an exact penalty function. **82c:49053a**
- (with Conn, Andrew R.) Erratum: "Second-order conditions for an exact penalty function". **82c:49053b**
- Conn, Andrew R. See Coleman, T. F., **82c:49053a** and **82c:49053b**
- Denkowski, Zdzisław. On the variational method without coerciveness. (See **82k:49004**)
- Dyckhoff, H. An optimality criterion for problems without differentiability on the boundary. **82j:49027**
- Finkelstein, A. V. Condition of growth in extremal problems with constraints. (Russian) **82j:49028**
- Gruver, W. A. (with Sachs, Ekkehard) ★Algorithmic methods in optimal control. **82j:49029**
- Hartung, Joachim. On exponential penalty function methods. (German and Russian summaries) **82b:49024**
- Iwamoto, Seiichi. Theory of dynamic programming and applications. (Japanese) **82c:49044**
- Jacimović, M. D. See Vasil'ev, F. P., **82j:49030**
- Parlar, Mahmut (with Vickson, R. G.) An optimal control problem with piecewise quadratic cost functional containing a "dead-zone". **82c:49025**
- Poljak, B. T. Subgradient methods: a survey of Soviet research. **82m:49046**
- Richter, Claus. Über Einbettungsverfahren der nichtlinearen Optimierung. **82f:49037**
- Über Mehrschrittverfahren der nichtlinearen Optimierung. (English and Russian summaries) **82g:49034**
- Sachs, Ekkehard. See Gruver, W. A., **82j:49029**
- Sherali, Hanif D. See Bazaraa, Mokhtar S., **82c:49043**
- Vasil'ev, F. P. (with Jacimović, M. D.) Iterative regularization of the Newton method. (Russian) **82j:49030**
- Vickson, R. G. See Parlar, Mahmut, **82c:49025**

secondary classifications:

- Arora, Jasbir S. (with Haug, Edward J.) Methods of design sensitivity analysis in structural optimization. (**82a:73043**)
- Ch'en, Chün Hsiung (with Lien, Ts'un Tè) A variational numerical solution of the one-dimensional wave propagation problem for an inhomogeneous medium. (Chinese summary) (**82d:78016**)
- Davison, Edward J. (with Ferguson, Ian J.) The design of controllers for the multivariable robust servomechanism problem using parameter optimization methods. (**82b:49061**)
- Ferguson, Ian J. See Davison, Edward J., (**82b:49061**)
- Fiacco, Anthony V. Nonlinear programming sensitivity analysis results using strong second order assumptions. (**82g:90076**)
- Großmann, Christian (with Kleinmichel, Helmut) ★Verfahren der nichtlinearen Optimierung. (German) [Methods of nonlinear optimization] (**82m:90134**)
- Haug, Edward J. See Arora, Jasbir S., (**82a:73043**)
- van der Hoek, G. ★Reduction methods in nonlinear programming. (**82d:90107**)
- Kleinmichel, Helmut. See Großmann, Christian, (**82m:90134**)
- Lien, Ts'un Tè. See Ch'en, Chün Hsiung, (**82d:78016**)
- Mayorga, R. V. (with Quintana, V. H.) A family of variable metric methods in function space, without exact line searches. (**82i:49029**)
- Polak, Elijah (with Tits, A. L.) A globally convergent, implementable multiplier method with automatic penalty limitation. (**82c:90084**)
- Quintana, V. H. See Mayorga, R. V., (**82i:49029**)
- Ritter, Klaus. Convergence and superlinear convergence of algorithms for linearly constrained minimization problems. (**82c:65037**)
- On the rate of superlinear convergence of a class of variable metric methods. (**82b:65054**)
- Tits, A. L. See Polak, Elijah, (**82c:90084**)
- Turcam, Angela. Some applications of duality. (**82g:90075**)
- Watson, Layne T. (with Yang, Wei H.) Methods for optimal engineering design problems based on globally convergent methods. (**82j:73060**)
- Yang, Wei H. See Watson, Layne T., (**82j:73060**)

49D39 Semi-infinite programming

- Meyn, K. H. A discretization method for systems of linear inequalities. **82m:49047**

49D40 Methods of quadratic programming type

- Al'ber, Ja. I. Minimization of functionals of class $C^{1,p}$ on bounded sets. (Russian) **82c:49054**
- Johnson, M. A. Further properties of bounds on the quadratic cost of linear multivariable optimal regulators. **82f:49038**

secondary classifications:

- Hager, William W. Inequalities and approximation. (**82i:49006**)
- Pang, Jong Shi. A new and efficient algorithm for a class of portfolio selection problems. (**82b:90014**)
- Yvon, J. P. Contrôle optimal et sous-optimal des systèmes distribués. (**82e:49003**)

49D45 Methods of convex programming type

- Bouchitté, Guy. Approximation interne de problèmes convexes du calcul des variations dans les espaces de type Sobolev-Orlicz: éléments finis et intégration numérique. **82c:49055**

- Ivanov, V. A. A problem on inequalities for norms of differential operators in homogeneous spaces. (Russian) **82c:49026**
- Jamy, Claude (with Vanbreugel, Michel; Potel, Alain) Programmation par polyalgorithmes: présentation et exemples de réalisation. (English summary) **82b:49052**
- Morgan-Sciarrino, Jacqueline Sur un procédé mixte d'approximation de problèmes de point de selle avec contraintes utilisant simultanément les méthodes de pénalisation interne et de discrétisation. **82c:49056**
- Potel, Alain See Jamy, Claude; et al., **82b:49052**
- Somesova, V. K. Continuous method for minimization of a convex function. (Russian) **82a:49040**
- Vanbreugel, Michel See Jamy, Claude; et al., **82b:49052**

secondary classifications:

- Curkov, V. I. Decomposition in the dynamic problems with control. (**82j:49019**)
- Rios, Hélène Une étude d'existence sur certains problèmes paraboliques. (English summary) (**82g:47042**)

49D49 Geometric programming

- Kumar, S. N. See Rao, P. V., **82c:49057**
- Rao, P. V. (with Kumar, S. N.) Optimal control of sampled data systems by geometric programming. **82c:49057**

49D50 Periodic optimization

- Raynal, Marie-Lise Homogénéisation d'un problème de diffusion non linéaire du type de Volterra. (English summary) **82f:49039**

secondary classifications:

- Bensoussan, Alain (with Lions, Jacques-Louis) Homogénéisation et perturbations singulières. (**82b:35014**)
- (with Lions, Jacques-Louis; Papanicolaou, George C.) ★Asymptotic analysis for periodic structures. (**82b:35001**)
- Caillerie, Denis Homogénéisation d'un corps élastique renforcé par des fibres minces de grande rigidité et réparties périodiquement. (English summary) (**82b:73063**)
- Colombini, Ferruccio (with Spagnolo, Sergio) Non stabilità d'una equazione iperbolica dans le cas de l'homogénéisation des coefficients par rapport au temps. (English summary) (**82b:35019**)
- Fukushima, Masatoshi A generalized stochastic calculus in homogenization. (**82b:60145**)
- Hludnev, A. M. Approximate description of vibrations of a rod of periodic structure with oscillator masses. (Russian) (**82b:73056**)
- Le Tallec, P. A mixed finite element approximation of the Navier-Stokes equations. (**82f:65115**)
- Li, Da Qian Comportements limites des solutions de certaines équations paraboliques d'ordre supérieur et leurs applications au contrôle optimal. (English summary) [Limit behaviors of solutions for some parabolic equations of higher order and their applications to optimal control] (**82m:35011**)
- Lions, Jacques-Louis See Bensoussan, Alain, (**82b:35014**) and (**82b:35001**)
- Madaune-Tort, Monique Sur un problème de perturbations singulières pour des inéquations variationnelles de type parabolique dégénéré. (English summary) (**82b:35016**)
- de Oliveira, Paula On the optimal design of a plate submitted to a rupture criterion. (**82m:73060**)
- Papanicolaou, George C. See Bensoussan, Alain; et al., (**82b:35001**)
- Paulin, Jeanne Saint Jean Homogénéisation et perturbations. (English summary) (**82c:35004**)
- Profeti, Alessandro (with Terreni, Brunello) The uniformity for convergence of parabolic operators in the case of homogenization. (Italian. English summary) (**82m:35069a**)
- (with Terreni, Brunello) On some methods for the study of the convergence of parabolic equations. (Italian. English summary) (**82m:35069b**)
- Spagnolo, Sergio See Colombini, Ferruccio, (**82b:35019**)
- Suquet, Pierre-M. Une méthode duale en homogénéisation. Application aux milieux élastiques périodiques. (English summary) (**82b:73018**)
- Terreni, Brunello See Profeti, Alessandro, (**82m:35069a**) and (**82m:35069b**)

49D99 None of the above, but in this section

- Avakov, E. R. On conditions for approximation of a lexicographical problem. (Russian) **82f:49040**
- Černous'ko, F. L. See Moiseev, N. N., **82k:49046**
- Cirlin, A. M. (with Sofieva, Ju. N.) Extension of extremal problems and nonstationary steady states of control objects. (Russian) **82b:49053**
- van Dooren, René (with Vlassenbroeck, Jacques) A new look at the brachistochrone problem. (French summary) **82j:49031**
- Gladwell, G. M. L. See Nguyen Dang Hung; et al., (See **82g:93003**)
- Györfi, László (with Kóczy, L. T.) An algorithm for nonparametric decision motivated by fuzzy approach. (Russian summary) **82a:49041**
- Hartmann, Gary L. See Safonov, Michael G.; et al., **82b:49055**
- Hasanov, V. H. Optimized discretization of plane continuous contours. **82k:49045**
- Kóczy, L. T. See Györfi, László, **82a:49041**
- Laub, Alan J. See Safonov, Michael G.; et al., **82b:49055**
- Moiseev, N. N. (with Černous'ko, F. L.) Asymptotic methods in the theory of optimal control. **82k:49046**
- Naval, É. S. Optimal control of the heat conduction process of a hollow cylinder. (Russian) **82b:49054**
- Nguyen Dang Hung (with de Saxcé, Gery; Gladwell, G. M. L.) Finite element analysis of contact problems based on the unilateral constraints formulation. (See **82g:93003**)

- Safonov, Michael G. (with Laub, Alan J.; Hartmann, Gary L.) Feedback properties of multivariable systems: the role and use of the return difference matrix. **82b:49055**
- de Saxcé, Gery See Nguyen Dang Hung; et al., (See **82g:93003**)
- Sofieva, Ju. N. See Cirlin, A. M., **82b:49053**
- Vlassenbroeck, Jacques See van Dooren, René, **82j:49031**
- White, L. W. Approximation of a parabolic optimal control problem by pseudoparabolic problems. **82m:49048**
- Convergence properties of optimal controls of pseudoparabolic problems. **82m:49049**

secondary classifications:

- Ageev, A. L. (with Vasin, V. V.) Convergence of the generalized method of residuals and its discrete approximations. (Russian) (**82c:65032**)
- Arbel, Ami Controllability measures and actuator placement in oscillatory systems. (**82c:93001**)
- Archetti, Francesco (with Betró, B.) A probabilistic algorithm for global optimization. (**82c:65042**)
- Betró, B. See Archetti, Francesco, (**82c:65042**)
- Bruckner, Gottfried On the speed of convergence of iteration methods. (**82c:47069**)
- Burchard, H. G. (with Waldo, R. A.) Some mathematical properties of empirical Gibbs functions. (**82c:80001**)
- Cameron, Robert Geoffrey See Kouvaritakis, B., (**82a:93025**)
- Kouvaritakis, B. (with Cameron, Robert Geoffrey) Pole placement with minimised norm controllers. (**82a:93025**)
- Minković, B. M. Optimization of linear, equally spaced, symmetrically excited antenna arrays. (Russian) (**82b:78026**)
- Payne, Anthony N. (with Polak, Elijah) An interactive rectangle elimination method for biobjective decision making. (**82c:90006**)
- Polak, Elijah See Payne, Anthony N., (**82c:90006**)
- Temam, Roger ★Navier-Stokes equations. (**82b:35133**)
- (Thomasset, François) See Temam, Roger, (**82b:35133**)
- Vasin, V. V. See Ageev, A. L., (**82c:65032**)
- Waldo, R. A. See Burchard, H. G., (**82c:80001**)
- Xie, Shen Quan Quadratic and cubic spline interpolation and their variational properties. (Chinese) (**82j:65005**)

49Exx Controllability and geometry of control problems

49E05 General dependence on controls

- Bornard, G. See Gauthier, J.-P., **82d:49031**
- Gauthier, J.-P. (with Bornard, G.) Stabilisation of bilinear systems, performance specification and optimality. **82d:49031**

secondary classifications:

- Amano, Kazuo A necessary condition for hypoellipticity of degenerate elliptic-parabolic operators. (**82b:35019**)
- Bertram, A. An introduction of internal constraints in a natural way. (**82g:73003**)

49E10 Orienter fields (contingency equations)

- Angell, Thomas S. On controllability for nonlinear hereditary systems: a fixed-point approach. **82a:49042**
- Bacciotti, Andrea Linear systems with piecewise constant controls. (Italian summary) **82b:49056**
- Brunovsky, Pavol Regular synthesis and singular extremals. **82c:49027**
- Israilov, I. (with Otakulov, S.) A class of differential inclusions. (Russian) **82k:49047**
- Kisielewicz, Michał Controllability of generalized systems. **82f:49041**
- Łojasiewicz, Stanisław, Jr. Some properties of accessible sets in nonlinear control systems. **82k:49048**
- Luenberger, David G. Nonlinear descriptor systems. **82j:49032**
- Otakulov, S. See Israilov, I., **82k:49047**
- Raczyński, S. On optimal control and reachable sets in a Banach space. **82f:49042**
- On control systems in a Banach space without compactivity assumptions. (Russian summary) **82h:49025**

secondary classifications:

- Angell, Thomas S. Some remarks on existence of optimal controls for Mayer problems with singular components. (**82k:49006**)
- Arbel, Ami Controllability measures and actuator placement in oscillatory systems. (**82c:93001**)
- Kobayashi, Toshihiro Discrete-time controllability for distributed parameter systems. (**82b:93006**)
- Łojasiewicz, Stanisław, Jr. The existence of solutions for lower semicontinuous orientor fields. (Russian summary) (**82j:34013**)
- Pruszkowski, Tadeusz An operational equation and differential equations with multivalued nonconvex right-hand side. (**82b:34016**)

49E15 Attainable sets, controllability

- Bacciotti, Andrea A note on optimality and extremality. (Italian. English summary) **82j:49033**
- Barbanti, Luciano Liénard equations and control. **82c:49028**
- Bornard, Bernard Contrôlabilité des systèmes non linéaires. (English summary) **82d:49032**
- Bressan, Alberto On the minimal time function in nonlinear systems. (Italian. English summary) **82d:49033**
- On two conjectures by Hájek. **82b:49057**

- Conti, Roberto A minimum time problem. **82c:49035**
- Finin, G. S. See Val'ev, K. G., **82c:49031**
- Gabsov, R. F. (with Karpuk, V. V.; Kirillova, F. M.) Some control problems for hereditary systems. **82a:49043**
- Graham, Walter J. Estimating controllability boundaries for uncertain systems. (See **82c:90081**)
- Estimating reachable sets. **82m:49050**
- Hunt, L. R. Reachable sets for nonlinear systems in the phase plane. **82a:49044**
- Karpuk, V. V. See Gabsov, R. F.; et al., **82a:49043**
- Kirillova, F. M. See Gabsov, R. F.; et al., **82a:49043**
- Knobloch, H. W. Higher order necessary conditions in optimal control theory. **82g:49035**
- Kolmanovskii, V. B. (with Mal'tzenberg, T. L.) On control of time for reaching a domain by random motion. **82m:49051**
- Korobov, V. I. (with Marinič, A. P.; Podolskii, E. N.) Controllability of nonlinear systems in the presence of constraints on the control. (Russian) **82d:49034**
- Lewis, Frank Leroy Riccati equation computation of supremal (F, G) -invariant and reachability subspaces. **82b:49049**
- Mal'tzenberg, T. L. See Kolmanovskii, V. B., **82m:49051**
- Marinič, A. P. See Korobov, V. I.; et al., **82d:49034**
- Nefedov, S. A. Dynamical systems with a nonexpanding domain of attainability. (Russian) **82c:49029**
- Nguyen Hoa Son Controllability of nonlinear systems with damped perturbations. (Russian) **82d:49035**
- Olbrot, Andrzej W. (with Żak, Stanisław H.) Sufficient and necessary conditions for spectral controllability and observability of linear retarded systems. **82c:49030**
- O'Reilly, John The discrete linear time invariant time-optimal control problem—an overview. **82c:49036**
- Podolskii, E. N. See Korobov, V. I.; et al., **82d:49034**
- Romanowicz, Zbigniew On the condition of controllability for linear nonstationary systems. (Polish. English summary) **82g:49036**
- Rubio, J. E. Controllability and extensions. **82b:49058**
- Rudenko, A. V. Representation of simultaneously reachable sets in nonlinear systems. **82m:49052**
- Suslov, S. I. Convexity of attainable sets of a class of dynamical systems. (Russian) **82b:49059**
- Val'ev, K. G. (with Finin, G. S.) Numerical synthesis of optimal regulators for nonlinear discrete control systems. (Russian) **82c:49031**
- Żak, Stanisław H. See Olbrot, Andrzej W., **82c:49030**

secondary classifications:

- Arutjunov, A. V. Time optimal processes with a linear control equation. (Russian. English summary) **(82c:49014)**
- Hunt, L. R. Global controllability of nonlinear systems in two dimensions. **(82j:57026)**
- Jurdjević, V. (with Kupka, Ivan A. K.) Control systems subordinated to a group action: accessibility. **(82f:93009)**
- Klamka, J. Controllability of nonlinear systems with delays in control. **(82d:93012)**
- Kupka, Ivan A. K. See Jurdjević, V., **(82f:93009)**
- Prihod'ko, A. P. Sets of attainability in Banach space. (Russian) **(82b:93011)**
- Saryčev, A. V. Index of second variation of a control system. (Russian) **(82f:49020)**
- Tonkov, E. L. Dynamical systems of translations and the questions of uniform controllability of a linear system. (Russian) **(82f:34080)**

49E20 Interrelations between stability problems and optimization problems

- Ahmed, N. U. (with Sen, A. K.) Control of synchronous orbit using Lyapunov stability theory. **82b:49060**
- Davison, Edward J. (with Ferguson, Ian J.) The design of controllers for the multivariable robust servomechanism problem using parameter optimization methods. **82b:49061**
- Ferguson, Ian J. See Davison, Edward J., **82b:49061**
- Kamen, Edward W. Linear discrete-time systems defined over a commutative Banach algebra with applications to two-dimensional systems. **82c:49058**
- Kwon, W. H. (with Pearson, A. E.) Feedback stabilization of linear systems with delayed control. **82a:49045**
- Maurer, Helmut Differential stability in optimal control problems. **82k:49050**
- Pearson, A. E. See Kwon, W. H., **82a:49045**
- Samson, C. Commande adaptative de systèmes à non minimum de phase. (English summary) **82d:49036**
- Sen, A. K. See Ahmed, N. U., **82b:49060**
- Tiberio Bianchini, Rosa Maria (with Zecca, P.) Local controllability for autonomous nonlinear systems. **82f:49043**
- Zecca, P. See Tiberio Bianchini, Rosa Maria, **82f:49043**

secondary classifications:

- Delfour, M. C. (with Lee, E. B.; Manitius, A.) F -reduction of the operator Riccati equations for hereditary differential systems. **(82a:49030)**
- Lee, E. B. See Delfour, M. C.; et al., **(82a:49030)**
- Ljasko, V. I. Adaptive control of systems with incomplete information. **(82b:93025)**
- Manitius, A. See Delfour, M. C.; et al., **(82a:49030)**
- Paulin, Jeannine Saint Jean Homogénéisation et perturbations. (English summary) **(82c:35004)**

49E25 Effect of perturbations on controllability

- Athans, Michael See Lehtomäki, Norman A.; et al., **82b:49063**
- Dmitriev, M. G. On a class of singularly perturbed problems of optimal control. **82i:49037**

- Dončev, Asen L. See Gičev, T. R., **82a:49046**
- Gičev, T. R. (with Dončev, Asen L.) Singular perturbation in optimal control problems with fixed final state. **82a:49046**
- Hirai, K. See Yasuda, Kazumori, (See **82d:93001**)
- Komornik, Jozef Optimal control of stabilizable time-varying linear systems with time delay. **82b:49062**
- Kuncevič, V. M. (with Lyčak, M. M.) Optimal control of dynamic objects with unknown parameters. **82f:49044**
- Lehtomäki, Norman A. (with Sandell, Nils R., Jr.; Athans, Michael) Robustness results in linear-quadratic Gaussian based multivariable control designs. **82b:49063**
- Lions, Jacques-Louis Asymptotic calculus of variations. **82f:49045**
- Lyčak, M. M. See Kuncevič, V. M., **82f:49044**
- McKeown, J. J. An approach to sensitivity analysis. **82b:49064**
- Sandell, Nils R., Jr. See Lehtomäki, Norman A.; et al., **82b:49063**
- Sezer, Mesut E. (with Šiljak, Dragoslav D.) Robustness of suboptimal control: gain and phase margin. **82b:49051**
- Šiljak, Dragoslav D. See Sezer, Mesut E., **82b:49051**
- Yasuda, Kazumori (with Hirai, K.) Optimization of large-scale systems by means of decentralized state feedback. (See **82d:93001**)

secondary classifications:

- Baiada, Emilio (with Fiocechi, Cristina) Classification of functions of several variables. (Italian) **(82b:26018)**
- Fiocechi, Cristina See Baiada, Emilio, **(82b:26018)**
- Gościński, Andrzej (with Zieliński, Krzysztof) A technique and a system structure for on-line activation moments determination for steady-state optimization. **(82f:93004)**
- Hassan, Mohammed F. (with Titli, A.; Singh, Madan G.; Hurteau, R.) Stability, stabilisation and performance of multilevel controllers under structural perturbations. I. Cutting the links between coordinator and subsystems. **(82b:49039a)**
- (with Singh, Madan G.) Stability, stabilisation and performance of multilevel controllers under structural perturbations. II. Stabilisation under any structural perturbation. **(82b:49039b)**
- Hurteau, R. See Hassan, Mohammed F.; et al., **(82b:49039a)**
- Roberts, S. M. Variational perturbation method and power-series approximation method. **(82i:34063)**
- Singh, Madan G. See Hassan, Mohammed F.; et al., **(82b:49039a)** and **(82b:49039b)**
- Titli, A. See Hassan, Mohammed F.; et al., **(82b:49039a)**
- Zieliński, Krzysztof See Gościński, Andrzej, **(82f:93004)**

49E30 Relations between controllability and optimal solutions

- Claude, Daniel Découplage des systèmes non linéaires analytiques ou rejet des perturbations. (English summary) **82b:49065**
- Emami-Naeini, A. (with Franklin, G. F.) Design of steady-state-quadratic-loss optimal digital controls for systems with a singular system matrix. **82a:49047**
- Franklin, G. F. See Emami-Naeini, A., **82a:49047**
- Ikeda, Saburo See Nakamori, Yoshiteru; et al., **82f:49046**
- Miyamoto, Sadaaki See Nakamori, Yoshiteru; et al., **82f:49046**
- Nakamori, Yoshiteru (with Miyamoto, Sadaaki; Ikeda, Saburo; Sawaragi, Yoshikazu) Measurement optimization with sensitivity criteria for distributed parameter systems. **82f:49046**
- Sawaragi, Yoshikazu See Nakamori, Yoshiteru; et al., **82f:49046**

secondary classifications:

- Barah, Ieroham S. Synthesis of continuous optimal time-invariant systems with prescribed eigenvalues. (Bulgarian. Russian and English summaries) **(82d:93040)**
- Bressan, Alberto On the minimal time function in nonlinear systems. (Italian. English summary) **(82d:49033)**

49E99 None of the above, but in this section

- Bortins, R. (with Boustany, N. M.; Powers, W. F.) The infinite-order singular problem. **82f:49047**
- Boustany, N. M. See Bortins, R.; et al., **82f:49047**
- Kajumov, R. I. Information sets of quasilinear systems. (Russian) **82m:49053**
- Klötzler, Rolf Starke Dualität in der Steuerungstheorie. **82c:49032**
- Kouvaritakis, B. On the asymptotic behaviour of optimal root loci. **82m:49054**
- Liverovskii, A. A. The Hölder property of the Bellman function of plane control systems. (Russian) **82j:49034**
- Phan Quoc Khanh A concept of optimality of degree p in the observation theory and optimal observability for convex functionals. (Polish and Russian summaries) **82m:49055**
- Powers, W. F. See Bortins, R.; et al., **82f:49047**

secondary classifications:

- Egorov, A. I. (with Šakirov, V. N.) Optimal control of vibrations of a conductor with a current in a magnetic field. (Russian) **(82c:78025)**
- Mahmoud, Magdi S. Multilevel systems: information flow in large linear control problems. **(82a:93036)**
- Šakirov, V. N. See Egorov, A. I., **(82c:78025)**

49Fxx Manifolds [See also 58Exx.]

- 49F05 Exterior differential forms, invariant integrals (Cartan theory) [See mainly 58A15.]

secondary classifications:

- Gutkin, D. Espace des jets et calcul des variations en dimension infinie. **(82f:58039)**

- Krivov, V. V. On the extremal differential form for generalized modulus. (Russian) (82i:58002)
- Kupersmidt, Boris Geometry of jet bundles and the structure of Lagrangian and Hamiltonian formalisms. (82e:58006)
- Tóth, Gábor On homotopy classes of mappings into flat Riemannian manifolds. (82i:58038)

49F10 Minimal surfaces [See mainly 53A10, also 58E12.]

- Abdulaev, R. N. A mixed boundary value problem for the minimal surface equation in nonconvex domains. (Russian) 82i:49038
- Anzellotti, Gabriele Dirichlet problem and removable singularities for functionals with linear growth. (Italian summary) 82i:49052
- Babenko, K. I. (with Jur'ev, S. P.) On the shape of a capillary liquid surface in a vertical cylinder of arbitrary cross section. (Russian) 82a:49048
- Chen, Jin Tzu On the existence of capillary free surfaces in the absence of gravity. 82g:49037
- Dao Cong Thi Multivariables and classical multidimensional Plateau problems. (Russian) 82b:49066
- Durand, Loyal Stability and oscillations of a soap film: an analytic treatment. 82i:49039
- Giusti, Enrico Parametric methods in nonparametric minimal surfaces. 82j:49035
- Heinz, Erhard Ein mit der Theorie der Minimalflächen zusammenhängendes Variationsproblem. 82d:49037
- Hildebrandt, Stefan (with Nitsche, Johannes C. C.) Minimal surfaces with free boundaries. 82e:49059
- (with Nitsche, Johannes C. C.) Optimal boundary regularity for minimal surfaces with a free boundary. 82i:49040
- Jur'ev, S. P. See Babenko, K. I., 82a:49048
- Korevaar, Nicholas J. On the behavior of a capillary surface at a re-entrant corner. 82e:49033
- Michael, D. H. Meniscus stability. (See 82f:76001)
- Nitsche, Johannes C. C. See Hildebrandt, Stefan, 82e:49059 and 82i:49040
- Schüller, Karlheinz Stabilität mehrfach zusammenhängender Minimalflächen. (English summary) 82e:49060

secondary classifications:

- Beckenbach, Edwin F. The formulas of Weierstrass and the fundamental theorem of algebra for minimal surfaces. (82c:53009)
- Beeson, Michael Some results on finiteness in Plateau's problem. I. (82g:53009)
- Böhme, Reinhold A Plateau problem with many solutions for boundary curves in a given knot class. (82m:58023)
- Brown, Robert Arthur (with Scriven, L. E.) The shape and stability of rotating liquid drops. (82m:76027)
- Dierkes, Ulrich ★ Isoperimetrische Variationsprobleme. (German) [Isoperimetric variational problems] (82m:58024)
- Dmitriev, V. G. On the construction of an \mathcal{H}_{n-1} -almost everywhere convex hypersurface in \mathbb{R}^{n+1} . (Russian) (82m:53052)
- Dziuk, Gerhard On the boundary behaviour of partially free minimal surfaces. (82i:53009)
- Fischer-Colbrie, D. Some rigidity theorems for minimal submanifolds of the sphere. (82b:53078)
- Gerhardt, Claus Evolutionary surfaces of prescribed mean curvature. (82m:53006)
- Goldschweizer, A. L. Mathematical rigidity of surfaces and physical rigidity of shells. (82a:73045)
- Lawson, H. Blaine, Jr. ★ Lectures on minimal submanifolds. Vol. I. (82d:53035a)
- ★ Lectures on minimal submanifolds. Vol. I. (82d:53035b)
- (with Michelsohn, M. L.) Clifford bundles, immersions of manifolds and the vector field problem. (82g:53065)
- (Lumley, John L.) See Annual review of fluid mechanics, (82f:76001)
- Meeks, William H., III The topological uniqueness of minimal surfaces in three-dimensional Euclidean space. (82b:53010)
- Michelsohn, M. L. See Lawson, H. Blaine, Jr., (82g:53065)
- Morgan, Frank A smooth curve in \mathbb{R}^3 bounding a continuum of minimal manifolds. (82b:53013)
- Mori, Hiroshi Minimal surfaces of revolution in H^3 and their global stability. (82i:53082)
- Mori, Hisashi On the stability of minimal surfaces. (Japanese) (82i:53050)
- Ollerenshaw, Kathleen The minimum surface connecting the sides of a cubic frame. (82b:53014)
- Petrenko, V. P. On the growth and distribution of values of minimal surfaces. (Russian) (82i:30049)
- Platonova, O. A. Singularities in the problem of the fastest passage of an obstruction. (Russian) (82i:58022)
- Scriven, L. E. See Brown, Robert Arthur, (82m:76027)
- Shikata, Yoshihiro On a lower bound of the numbers of minimal surfaces. (82b:58032)
- Tausch, Engelbert The n -dimensional least area problem for boundaries on a convex cone. (82e:53014)
- Turkington, Bruce Height estimates for exterior problems of capillarity type. (82i:35070)
- (Van Dyke, Milton) See Annual review of fluid mechanics, (82f:76001)
- (Wehausen, J. V.) See Annual review of fluid mechanics, (82f:76001)
- Xavier, Frederico V. The Gauss map of a complete nonflat minimal surface cannot omit 7 points of the sphere. (82b:53015)
- Yau, Stephen S. T. Kohn-Rossi cohomology and its application to the complex Plateau problem. I. (82k:32038)
- Annual review of fluid mechanics ★ Annual review of fluid mechanics. Vol. 13. (82f:76001)
- Fluid mechanics ★ Annual review of fluid mechanics. Vol. 13. (82f:76001)

49F15 Morse theory in Hilbert and other spaces [See also 57R27, 58Exx.]

secondary classifications:

- Alexander, Ralph (with Alexander, Stephanie) Geodesics in Riemannian manifolds-with-boundary. (82j:58040)
- Alexander, Stephanie See Alexander, Ralph, (82j:58040)
- Bondarčuk, V. S. A periodic problem of the calculus of variations and deformation of Hamiltonian systems. (Russian) (82j:58044)
- Ito, Hidekazu Long periodic solutions near an equilibrium in general resonance cases. (82j:58072)
- Morvan, Jean-Marie Some topological properties of the Lipschitz-Killing curvature. (82d:53036)
- Rassias, Themistocles M. Global analysis of the Morse-Smale index for a minimal immersion in \mathbb{R}^n , $n \geq 3$ and its application to the classification problem of unstable minimal immersions. (82i:53007)
- Uhlenbeck, K. Morse theory by perturbation methods with applications to harmonic maps. (82k:58029)

49F20 Geometric measure and integration theory, integral and normal currents, flat chains and cochains, varifolds [See also 28A75, 32C30, 58A25, 58C35.]

- Groemer, H. The average measure of the intersection of two sets. 82c:49034
- Hutchinson, John E. Fractals and self-similarity. 82h:49026
- Kleinjohn, Norbert Nächste Punkte in der Riemannschen Geometrie. 82k:49053

secondary classifications:

- Bardaro, Carlo Kernels, the symmetric derivative and the perimeter of a measure. (Italian) (82e:28011)
- Berger, M. S. (with Bombieri, E.) On Poincaré's isoperimetric problem for simple closed geodesics. (82i:58023)
- Bombieri, E. See Berger, M. S., (82i:58023)
- Brakke, Kenneth A. ★ The motion of a surface by its mean curvature. (82c:49035)
- Parks, Harold R. The Gauss map of a three-dimensional minimal surface. (82m:53007)
- Put, Mircea Sur la stabilité des tenseurs. (English summary) (82g:58004)
- Sperner, Emanuel, Jr. Symmetrization and currents. (82e:52010)

49F22 Existence and structure of solutions to variational problems in geometric measure-theoretic setting

- Almgren, Frederick J., Jr. Dirichlet's problem for multiple valued functions and the regularity of mass minimizing integral currents. 82g:49038
- Brakke, Kenneth A. ★ The motion of a surface by its mean curvature. 82c:49035
- Brandt, Primo A spectrum of weighted variations in subsets of \mathbb{R} . Semicontinuity theorems. (Italian) 82d:49038
- Brothers, John E. Invariance of solutions to invariant parametric variational problems. 82h:49027
- Invariance of solutions to invariant nonparametric variational problems. 82h:49067
- Emmer, Michele Le problème de la capillarité en l'absence de gravité: une formulation variationnelle. (English summary) 82b:49068
- Finin, G. S. See Valeev, K. G.; et al., 82g:49040
- Giusti, Enrico The pendent water drop. A direct approach. (Italian summary) 82c:49036
- A singular solution to the mean curvature equation. (Italian summary) 82d:49039
- The equilibrium configuration of liquid drops. 82c:49037
- Mitropol'skii, Ju. A. See Valeev, K. G.; et al., 82g:49040
- Schoen, Richard (with Simon, Leon) Regularity of stable minimal hypersurfaces. 82k:49054
- Simon, Leon See Schoen, Richard, 82k:49054
- Taylor, Jean E. Surfaces minimizing the integrals of crystalline integrands. 82g:49039
- Valeev, K. G. (with Mitropol'skii, Ju. A.; Finin, G. S.) Application of the optimal manifold principle to the synthesis of optimal regulators. (Russian) 82g:49040

secondary classifications:

- Almgren, Frederick J., Jr. See Thurston, R. N., (82c:82089)
- Clarke, Frank H. A variational proof of Aumann's theorem. (82k:28011)
- Fedorov, V. P. Extremal problems in Pogorelov's cone. (Russian) (82g:52006)
- Michael, D. H. Meniscus stability. (See 82f:76001)
- Perko, L. M. A class of superquadratic boundary value problems of capillary type. (82c:34021)
- Thurston, R. N. (with Almgren, Frederick J., Jr.) Liquid crystals and geodesics. (French summary) (82c:82089)

49F25 Surface area; Weierstrass and Burkill integrals, subadditive set functions

- Brandt, Primo (with Salvadori, Anna) A representation theorem for the parametric integral of Weierstrass in the calculus of variations. (Italian. English summary) 82e:49061
- Candeloro, Domenico (with Pucci, Patrizia) The Burkill-Cesari integral as integral of the calculus of variations. (Italian. English summary) 82f:49048
- Ch'eng, Nai Kuang (with Liu, Feng Chè) Approximation of nonparametric surfaces of finite area. 82k:49055
- Fusco, Nicola Duality and semicontinuity for integrals of area type. (Italian. English summary) 82m:49056
- Liu, Feng Chè See Ch'eng, Nai Kuang, 82k:49055
- Pucci, Patrizia See Candeloro, Domenico, 82f:49048

- Ragni, Marcello Approximating measures in variation, in length, in area and conditions for absolute continuity. (Italian) (82m:49057)
 Salvadori, Anna See Brandi, Primo, 82c:49061
 Taylor, Jean E. Nonexistence of F -minimizing embedded disks. 82i:49041

secondary classifications:

- Bindschadler, David (with Nishiura, Togo) The Goffman-Liu area and Plateau's problem. (82g:28013)
 Brandi, Primo (with Salvadori, Anna) Martingales and Burkil-Cesari integrals. (Italian. English summary) (82m:28016)
 Bullen, P. S. Nonabsolute integrals: a survey. (82a:26006)
 Cabras, A. (with Racugno, W.) Equivalence of the Weierstrass and Lebesgue integrals in the problem of the integrability of compound functions. (Italian. English summary) (82m:26009)
 Goffman, Casper (with Nishiura, Togo) De Giorgi perimeter, Lebesgue area, Hausdorff measure. (82m:28015)
 Nishiura, Togo See Bindschadler, David, (82g:28013) and Goffman, Casper, (82m:28015)
 Racugno, W. See Cabras, A., (82m:26009)
 Salvadori, Anna See Brandi, Primo, (82m:28016)

49F99 None of the above, but in this section

- Böhme, Reinhold (with Hildebrandt, Stefan; Tausch, Engelbert) The two-dimensional analogue of the catenary. 82c:49062
 Finin, G. S. See Valčev, K. G.; et al., 82d:49040
 Hildebrandt, Stefan See Böhme, Reinhold; et al., 82c:49062
 Mitropol'skii, Ju. A. See Valčev, K. G.; et al., 82d:49040
 Tausch, Engelbert See Böhme, Reinhold; et al., 82c:49062
 Valčev, K. G. (with Mitropol'skii, Ju. A.; Finin, G. S.) Numerical synthesis of optimal control for linear steady-state systems. (Russian) 82d:49040
 Wente, Henry C. Large solutions to the volume constrained Plateau problem. 82a:49049

secondary classifications:

- Dedecker, P. (with Tulczyjew, W. M.) Spectral sequences and the inverse problem of the calculus of variations. (82f:58038)
 Klingenberg, Wilhelm On the existence of closed geodesics on spherical manifolds. (82d:58024)
 Massa, Enrico Variational techniques in general relativity: generalisations of a classical result of A. Palatini. (Italian. English summary) (82k:83003)
 Nagura, Toshinobu On the Jacobi differential operators associated to minimal isometric immersions of symmetric spaces into spheres. I. (82c:53041)
 Ragionieri, Rodolfo (with Ricci, Riccardo) Hamiltonian formalism in the calculus of variations. (Italian summary) (82g:58025)
 Reinora, Alfonso A Sard theorem for generalized equations. (Spanish. English summary) (82m:58010)
 Ricci, Riccardo See Ragionieri, Rodolfo, (82g:58025)
 Simon, Leon Regularity of capillary surfaces over domains with corners. (82d:49043)
 Tamm, Martin Subanalytic sets in the calculus of variation. (82h:32012)
 Tulczyjew, W. M. See Dedecker, P., (82f:58038)
 Verheyen, Paul Formules du type de Simons et applications. (82g:53066)

49Gxx Variational methods for eigenvalues [See also 47A70.]

49G05 Variational approach to eigenvalues

- Bareket, Miriam On the convexity of the sum of the first eigenvalues of operators depending on a real parameter. (German summary) 82m:49058
 Djakin, V. V. (with Raevskii, V. Ja.) The method of penalty functions in eigenvalue problems. (Russian) 82k:49056
 Müller, A. M. K. Variational procedure yielding upper and lower bounds to eigenvalues of Hermitian operators. 82a:49050
 Novotná, Jarmila Discrete analogues of Wirtinger's inequality for a two-dimensional array. (Czech summary) 82f:49049
 Raevskii, V. Ja. See Djakin, V. V., 82k:49056

secondary classifications:

- Bardos, Claude (with Guillot, Jean-Claude; Ralston, James V.) Relation de Poisson pour l'équation des ondes dans un ouvert non borné. (82f:35104)
 Bérard, Pierre H. (with Meyer, Daniel) Une généralisation de l'inégalité de Faber-Krahn. (English summary) (82j:58107)
 Birman, M. Š. (with Solomjak, M. Z.) Asymptotic behavior of the spectrum of variational problems on solutions of elliptic equations. (Russian) (82i:35115)
 (with Solomjak, M. Z.) Asymptotic behavior of the spectrum of variational problems on solutions of elliptic equations in unbounded domains. (Russian) (82a:35084)
 Chavel, Isaac (with Feldman, Edgar A.) Isoperimetric inequalities on curved surfaces. (82i:53056)
 Chiti, Giuseppe Inequalities for the first three membrane eigenvalues. (Italian summary) (82g:35087)
 Della Mattia Maderna, Carla (with Salsa, Sandro) Symmetrization in Neumann problems. (82h:35049)
 Fang, Fu Kang Variational calculation of lower excited states in a chemical bistable system. (82e:82010)
 Feldman, Edgar A. See Chavel, Isaac, (82i:53056)
 Frænkel, L. E. A lower bound for electrostatic capacity in the plane. (82i:78012)
 Guillot, Jean-Claude See Bardos, Claude; et al., (82f:35104)

- Horgan, C. O. See Nemat-Nasser, S., (82d:34034)
 Litvinov, V. G. Optimal eigenvalue problems. (Russian) (82m:49006)
 Meyer, Daniel See Bérard, Pierre H., (82j:58107)
 Müller, A. M. K. General outline of the projector variation method. (82f:81018)
 Nadenik, Zbyněk Eine isoperimetrische Ungleichung für die Paare der Raumkurven. (Czech summary) (82f:52012)
 Eine geometrische Anwendung eines Seitenstückes zur Ungleichung von Wirtinger. (Czech summary) (82k:52019)
 Nemat-Nasser, S. (with Horgan, C. O.) Variational methods for eigenvalue problems with discontinuous coefficients. (82d:34034)
 Ozawa, Shin Surgery of domain and the Green's function of the Laplacian. (82c:58056)
 Ralston, James V. See Bardos, Claude; et al., (82f:35104)
 Salsa, Sandro See Della Mattia Maderna, Carla, (82h:35049)
 Shibutani, Norimasa Nonlinear eigenvalue problems associated with subdifferentials. (82j:58030)
 Shimakura, Norio Stabilité locale de la première valeur propre du laplacien pour le problème de Dirichlet. (English summary) (82f:35144)
 Solomjak, M. Z. See Birman, M. Š., (82a:35084) and (82b:35115)
 Sperb, René P. On a mathematical model describing the aggregation of amoebae. (82k:92034)
 Sperner, Emanuel, Jr. Spherical symmetrization and eigenvalue estimates. (82c:35062)

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- Bassotti Rizza, Lucilla Numerical verification of the classical asymptotic formula of H. Weyl for the eigenvalues of elasticity. (Italian. English summary) 82d:49041
 Daly, P. See Helps, J. D., 82f:49050
 Helps, J. D. (with Daly, P.) A lower bound for the two-dimensional Helmholtz equation. 82f:49050
 Hersch, Joseph Obere und untere Schranken für Eigenwerte durch Hilfsprobleme. (English summary) 82h:49028
 Mohsen, A. On the eigenvalue problem of the Laplacian operator. 82a:49051
 Skvorcov, V. I. Numerical procedures for determining frequencies of natural oscillations and damping factors of one-dimensional systems with distributed parameters. (Russian) 82c:49042

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- Bongers, Achim Über ein Rayleigh-Ritz-Verfahren zur Bestimmung kritischer Werte. (English summary) (82c:58011)
 Botha, J. F. See Schoombie, S. W., (82i:65072)
 Colle, Sergio A variational principle for Green's functions approximation. (82k:35030)
 Davini, C. One-dimensional problems in the stability of thin shells. (82e:73048)
 Hu, Hai Chang On a variational principle in the theory of dynamic stability of elastic systems. (82h:73032)
 Komarenko, O. N. Estimates of the convergence of the variational method in the eigenvalue problem of vibrations of a fluid in a half space with a cut-out strip. (Russian) (82b:76018)
 Mansfield, Lois On mixed finite element methods for elliptic equations. (82b:65133)
 Neittaanmäki, Pekka (with Picard, Rainer) Error estimates for the finite element approximation to a Maxwell-type boundary value problem. (82b:78006)
 Picard, Rainer See Neittaanmäki, Pekka, (82b:78006)
 Schoombie, S. W. (with Botha, J. F.) Error estimates for the solution of the radial Schrödinger equation by the Rayleigh-Ritz finite element method. (82i:65072)
 Srubčik, L. S. Precritical equilibrium of a thin shallow shell of revolution and its stability. (82i:73046)
 Tarnai, T. Lateral buckling analysis of beams by the theory of quadratic operator pencils. (82h:73031)

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- Brown, R. D. Convergence of approximation methods for eigenvalues of completely continuous quadratic forms. 82c:49063
 Fox, David W. A method for lower bounds for frequencies of thin skew plates. 82b:49069
 Grecchi, Vincenzo Bazley-Fox approximations, method of the matrix moments and the applications to anharmonic oscillators. (Italian. English summary) 82c:49038
 Sahnović, L. A. Effective construction of noncontinuable Hermite-positive functions of several variables. (Russian) 82j:49036

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- Binding, Paul On generalised and quadratic eigenvalue problems. 82m:49059
 Brietzke, Eduardo (with Nowosad, Pedro) Optimal control of eigenvalues. I. (See 81j:49001a)
 Martin, D. H. Conditional positivity of quadratic forms in Hilbert space. 82b:49070
 Nowosad, Pedro See Brietzke, Eduardo, (See 81j:49001a)

secondary classifications:

- Berger, W. A. See Kreuzer, K.-G.; et al., (82c:47037)
 Bradley, John Spurgeon (with Hinton, Don B.; Kauffman, Robert M.) On the minimization of singular quadratic functionals. (82f:49015)
 Dancer, Edward Norman On the existence of solutions of certain asymptotically homogeneous problems. (82f:58029)
 Ganguly, K. On the existence of a solution for a slab critical problem. (82b:47019)
 Hinton, Don B. See Bradley, John Spurgeon; et al., (82f:49015)
 Jonckheere, Edmond A. (with Silverman, Leonard M.) Spectral theory of the linear-quadratic optimal control problem: a new algorithm for spectral computations. (82f:93047)
 Kauffman, Robert M. See Bradley, John Spurgeon; et al., (82f:49015)

- Kreuzer, K.-G. (with Miller, H. G.; Berger, W. A.) The Lanczos algorithm for selfadjoint operators. (82c:47037)
- Kulkarni, R. P. (with Limaye, B. V.) On error bounds in strong approximations for eigenvalue problems. (82c:65100)
- Limaye, B. V. See Kulkarni, R. P. (82c:65100)
- Martin, D. H. The spectra of bounded linear selfadjoint operators relative to a cone in Hilbert space. (82i:49008)
- Miller, H. G. See Kreuzer, K.-G.; et al. (82c:47037)
- Noor, M. Aslam A constructive proof of the Lax-Milgram lemma. (82c:47023)
- Silverman, Leonard M. See Jonckheere, Edmond A. (82f:93047)
- Song, Ch'ang Ho Variational methods for the solution of linear operator equations in Hilbert space. (Korean. English summary) (82d:65046)

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- Arthurs, Arnold Magowan ★Complementary variational principles. (82d:49009)
- Bagirova, S. Ju. See Maksudov, F. G.; et al. (82h:70035)
- Hasegawa, Hiroshi (with Nakagomi, Teruaki) On the characterization of the stationary state of a class of dynamical semigroups. (82d:82018)
- Maksudov, F. G. (with Bagirova, S. Ju.; Šamilov, A. H.) Smoothness of certain functionals, given in implicit form by a functional equation. (Russian. Azerbaijani and English summaries) (82h:70035)
- Menzala, Gustavo Perla On regular solutions of a nonlinear equation of Choquard's type. (82a:35035)
- Nakagomi, Teruaki See Hasegawa, Hiroshi. (82d:82018)
- Šamilov, A. H. See Maksudov, F. G.; et al. (82h:70035)
- Stuart, C. A. Bifurcation for variational problems when the linearisation has no eigenvalues. (82c:58015)

49H05 Variational principles of physics [See also 70-XX, 81-XX.]

- Atanacković, T. M. See Đukić, Đorđe S. 82k:49057
- Baumgarte, J. Verallgemeinerung des Jacobischen Prinzips der kleinsten Wirkung auf den allgemeinen nichtkonservativen Fall. (82c:49064)
- Burrows, B. L. (with Perks, A. J.) Complementary variational principles and variational-iterative principles. 82m:49060
- Čyras, A. A. Principle types of optimization problems in the mechanics of deformed solids and their mathematical models. (See 82g:93003)
- Đukić, Đorđe S. (with Atanacković, T. M.) Error bounds via a new extremum variational principle, mean square residual and weighted mean square residual. 82k:49057
- Dutt, Ranabir Role of a linear Lagrangian in a variational method for nonlinear periodic problems. 82f:49051
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- Gerhardt, Claus A free boundary value problem for capillary surfaces. 82c:49065
- Goloviznin, V. M. (with Samarskii, A. A.; Favorskii, A. P.) A variational principle for systems with distributed parameters of hydrodynamic type. (Russian) 82k:49058
- Ho, Hwa Shan Variational theorem maximum strain energy principle and solution method to the boundary value problems in elasticity. 82d:49042
- Hojman, Sergio (with Montemayor, Rafael) S-equivalent Lagrangians for free particles and canonical quantization. 82f:49052
- Kalikstein, Kalman Formulation of variational principles via Lagrange multipliers. 82g:49041
- Montemayor, Rafael See Hojman, Sergio. 82f:49052
- Perks, A. J. See Burrows, B. L. 82m:49060
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- Samarskii, A. A. See Goloviznin, V. M.; et al. 82k:49058
- Simon, Leon Regularity of capillary surfaces over domains with corners. 82d:49043
- Szefer, G. A unified approach to optimal control and mechanics of constrained continua. (See 82g:93003)

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- Adamowicz, W. Plane waves in gauge theories of gravitation. (82f:83066)
- Agoškov, V. I. See Marčuk, G. I. (82f:82077)
- Anderson, Ian M. (with Duchamp, T.) On the existence of global variational principles. (82d:58027)
- The principle of minimal gravitational coupling. (82c:83044)
- Anderson, Norman (with Arthurs, Arnold Magowan) Variational principles for Maxwell's equations. II. (82k:78002)
- (with Arthurs, Arnold Magowan) Variational solutions of the Thomas-Fermi equation. (82g:81009)
- Arthurs, Arnold Magowan See Anderson, Norman. (82g:81009) and (82k:78002)
- Atanacković, T. M. A stationarity principle for simple elastic materials. (82c:73021)
- Variational principles for column buckling. (82h:73044)
- Atkins, W. K. (with Davis, W. R.) Lanczos-type potentials in nonabelian gauge theories. (Italian and Russian summaries) (82c:81075)
- Athuri, Satya N. On some new general and complementary energy theorems for the rate problems in finite strain, classical elastoplasticity. (82h:73017a)
- Addendum: "On some new general and complementary energy theorems for the rate problems in finite strain, classical elastoplasticity". (82h:73017b)
- Bardakci, Korkut (with Caldi, D. G.; Neuberger, H.) Dominant Euclidean configurations for all N . (82b:81080)
- Bedeaux, D. See van Saarloos, W.; et al. (82c:76005)
- Berditskii, V. L. Energy methods in certain problems of damping of solutions. (82g:73010)

(with Misjura, V. A.) On a dual variational principle in geometrically nonlinear elasticity theory. (82g:73014)

Variational-asymptotic method of constructing a theory of shells. (82k:73062)

- Rhattacharya, D. K. See Singh, Punyatma. (82a:76072)
- Borrelli, Alessandra (with Patria, Maria Cristina) Variational principles of the mechanics of inextensible elastic solids. (Italian. English summary) (82m:73015)
- Bruzzo, Ugo Variational characterization of torsionless connections on Riemannian manifolds. (82j:58042)
- Buchanan, G. R. Variational functional for diffusion in a solid with memory. (82c:73005)
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- Castagnino, Mario (with Chimento, Luis) Two theorems on flat space-time gravitational theories. (82b:83058)
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- Chimento, Luis See Castagnino, Mario. (82b:83058)
- Clément, Gérard Classical mechanics of autocomposite particles. (82c:70016)
- Collins, William D. Dual extremum principles and Hilbert space decompositions. (82b:49049)
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- Debière, Jean-François Bilan des tensions de Reynolds dans une interaction onde de choc-turbulence. (English summary) (82a:76041)
- Duchamp, T. See Anderson, Ian M. (82d:58027)
- Dvornikov, V. A. Some energy aspects of the theory of elasticity and plasticity. (Russian) (82h:73022)
- Epstein, Marcelo (with Segev, Reuven) Differentiable manifolds and the principle of virtual work in continuum mechanics. (82d:73008)
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- Goloviznin, V. M. (with Koršija, T. K.; Samarskii, A. A.; Tiškin, V. F.; Favorskii, A. P.) Variational schemes of magnetohydrodynamics in an arbitrary coordinate system. (Russian) (82c:76073)
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- Gregorash, D. (with Papini, G.) Weyl-Dirac theory with torsion. (Italian and Russian summaries) (82b:83067a)
- (with Papini, G.) Weyl-Dirac theory with torsion. II. Foundations and conservation equations. (Italian and Russian summaries) (82b:83067b)
- Gröger, Konrad Asymptotic behaviour of elastoplastic bodies under periodic loading. (German and Russian summaries) (82c:73026)
- Gumiński, K. On the Natanson principle of irreversible processes. (82f:80002)
- Guo, Zhong Heng The unified theory of variational principles in nonlinear elasticity. (Polish and Russian summaries) (82f:73013)
- Einheitliche Theorie der Variationsprinzipien in der nichtlinearen Elastizität. (82m:73014)
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- Haug, Edward J. (with Rousset, Bernard) Design sensitivity analysis in structural mechanics. I. Static response variations. (82h:73046a)
- (with Rousset, Bernard) Design sensitivity analysis in structural mechanics. II. Eigenvalue variations. (82j:73046b)
- Hiltl, Donald L. Implementing Hamilton's law of varying action with shifted Legendre polynomials. (82a:70015)
- Hornedski, Gregory Walter Gauge invariance and charge conservation in nonabelian gauge theories. (82c:81101)
- Conservation of charge and second-order gauge-tensor field theories. (82c:81102)
- Huy Dong Bui (with Ky Dang Van; Stolz, Claude) Formulations variationnelles du problème en vitesse pour le solide élastique-fragile avec zone endommagée. (English summary) [Variational principles applicable to rate boundary value problems of an elastic-brittle solid with a damaged zone] (82k:73066)
- Irimiciu, N. See D'Ambrosio, Ubratan; et al. (82a:70016)
- Jantzen, Robert T. Variational principles in cosmology. (Italian and Russian summaries) (82c:83033)
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- Koršija, T. K. (with Ljubimov, B. Ja.; Favorskii, A. P.) Hamilton's principle for fluid in Euler variables. (Russian) (82c:76023)
- See also Goloviznin, V. M.; et al. (82c:76073)
- Kraiko, A. N. ★Вариационные задачи газовой динамики. (Russian) [Variational problems of gas dynamics] (82d:76064)
- Kramer, Peter (with Saraceno, Marcos) ★Geometry of the time-dependent variational principle in quantum mechanics. (82m:81001)
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- Lee, Sang J. (with Shield, Richard T.) Variational principles in finite elastostatics. (German summary) (82z:73021a)
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- ★Stability of elastic systems. (82g:73001b)
- Analysis of nonconservative, nonholonomic systems. (See 82d:00006)
- Léné, Françoise (with Leguillon, D.) Étude de l'influence d'un glissement entre les constituants d'un matériau composite sur ses coefficients de comportement effectifs. (English summary) [Effects of slip between components in a composite material, on its effective constitutive coefficients] (82z:73053)
- Ljubimov, B. Ja. See Koršija, T. K.; et al., (82z:76023)
- Ljubina, E. A. On instability of equilibrium when the force function is not a maximum. (82f:70007)
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- See also D'Ambrosio, Ubratan; et al., (82z:70016)
- Marčuk, G. I. (with Agoskov, V. I.) Kinetic equations and variational principles. (82z:82077)
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- Mazur, P. See van Saarloos, W.; et al., (82z:76005)
- Miao, Tian De (with Chen, Chang Jun) On the Reissner theory of bending of an elastic plate. (Chinese. English summary) (82z:73061)
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- Neugebauer, Gernot Variationsprinzipien in der Thermodynamik irreversibler Prozesse. (Russian and English summaries) (82z:83024)
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- Reddy, B. D. Dual extremum principles in the dynamics of rigid perfectly plastic bodies undergoing finite deformations. (82z:73037)
- Reddy, J. N. A penalty finite element for nonlinear analysis of thin and moderately thick plates. (82z:49039)
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- van Saarloos, W. (with Bedeaux, D.; Mazur, P.) Hydrodynamics for an ideal fluid: Hamiltonian formalism and Liouville equation. (82z:76005)
- Safronenko, V. G. See Vorovii, I. I., (82z:73008)
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- Shield, Richard T. See Lee, Sang J., (82z:73021a) and (82z:73021b)
- Singh, Punyama (with Bhattacharya, D. K.) A new variational technique to free convection boundary layer flow and heat transfer. (82z:76072)
- Stolz, Claude See Huy Dong Bui; et al., (82z:73066)
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- Tada, Yukio See Hamada, Minoru; et al., (82z:73058)
- Taroco, Edgardo See Feijóo, Raúl A., (82z:73019)
- Tatarinov, Ja. V. A global view of the dynamics of a rigid body. Passage to the quotient system. (Russian. French summary) (82z:70014)
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- Treder, Hans-Jürgen Die teleskopischen Prinzipien der Gravitationstheorie. (English summary) (82z:83001)
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- Vorovii, I. I. (with Safronenko, V. G.) Use of variational principles in coupled problems of thermoviscoelastic shells. (82z:73068)
- Wang, Zi Qiang Uniqueness, stability and variational principle for a large plastic deformation problem. (Chinese. English summary) (82z:73033)
- Washizu, Kyoichiro A note on the principle of stationary complementary energy in nonlinear elasticity. (82z:73012)
- Weber, René Willi Eine alternative Herleitung der Euler-Hamiltonschen Gleichungen der Mechanik. (English summary) (82z:58043)
- Willis, J. R. Variational principles for dynamic problems for inhomogeneous elastic media. (82z:73021)
- Woźniak, Czesław Physical and numerical discretizations in the mechanics of structures. (Polish. English and Russian summaries) (82z:73011)
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- Zelnorovii, V. A. (with Sedov, L. I.) On the variational method of derivation of equations of state for a material medium and a gravitational field. (82z:83024)
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- De Temple, Duane W. (with Iverson, D. G.) Geometric aspects of linear transformations of the plane. 82z:51001
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- Prolov, S. A. ★Сборник задач по начертательной геометрии. (Russian) [A collection of problems in descriptive geometry] 82z:51002
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- Graf, Ulrich ★Darstellende Geometrie. (German) [Descriptive geometry] 82z:51003
- (Gutiérrez-Novoa, L.) See Harris, Jim, 82z:51002
- Haigh, Gordon A "natural" approach to Pick's theorem. 82z:51001
- Harris, Jim Some remarks on: "Non-Euclidean real numbers" [Boll. Un. Mat. Ital. B (5) 16 (1979), no. 2, 390-404; MR 80j:51020] by L. Gutiérrez-Novoa. 82z:51002
- Heyting, A. ★Axiomatic projective geometry. 82z:51003
- Honsberger, Ross Kepler's conics. (See 82z:00006)
- Iverson, D. G. See De Temple, Duane W., 82z:51001
- Kapur, J. N. ★Transformation geometry. 82z:51001
- Kovalev, S. N. See Mihailenko, V. E.; et al., 82z:51004
- Levina, Ž. G. See Mihailenko, V. E.; et al., 82z:51004
- Lingenberg, Rolf ★Grundlagen der Geometrie. (German) [Foundations of geometry] 82z:51002
- Locher-Ernst, Louis ★Urphänomene der Geometrie. Erster Teil. (German) [Urphenomena of geometry. Part I] 82z:51001a
- ★Projektive Geometrie und die Grundlagen der Euklidischen und Polareuklidischen Geometrie. Urphänomene der Geometrie. Zweiter Teil. (German) [Projective geometry and the foundations of Euclidean and polar Euclidean geometry. Urphenomena of geometry. Part II] 82z:51001b
- Malinorskaja, V. I. See Mihailenko, V. E.; et al., 82z:51004
- Mihailenko, V. E. (with Anpilogova, V. A.; Kovalev, S. N.; Levina, Ž. G.; Malinorskaja, V. I.; Oleščuk, T. Ju.; Panasjuk, L. S.; Puhov, I. K.; Sedleckaja, N. I.) ★Сборник задач по начертательной геометрии с элементами программирования. (Russian) [A collection of problems in descriptive geometry with elements of programming] 82z:51004
- Mitschka, Arno (with Strehl, Reinhard) ★Einführung in die Geometrie. (German) [Introduction to geometry] 82z:51004
- Oleščuk, T. Ju. See Mihailenko, V. E.; et al., 82z:51004
- Panasjuk, L. S. See Mihailenko, V. E.; et al., 82z:51004
- Puhov, I. K. See Mihailenko, V. E.; et al., 82z:51004
- (Schubert, Ernst) See Locher-Ernst, Louis, 82z:51001a and 82z:51001b
- Sedleckaja, N. I. See Mihailenko, V. E.; et al., 82z:51004
- Siebert, Helmut Die Berechnung von π nach Legendre—ein Verfahren für Taschenrechner mit Verräglichkeiten. 82z:51005
- (Sinha, P. C.) See Efimov, N. V., 82z:51001
- Strehl, Reinhard See Mitschka, Arno, 82z:51004
- Vaisman, Izu ★Foundations of three-dimensional Euclidean geometry. 82z:51002
- secondary classifications:
- (Banchoff, Thomas F.) See Selected papers: Geometry, (82c:01041)
- Beck, Uwe Mathematisieren um eine Feldmeßaufgabe. (82z:51026)
- (D'Atri, Joseph E.) See Selected papers: Geometry, (82c:01041)
- De Boer, J. H. Complex projective versus real affine. (Dutch) (82g:14001)
- Eddy, Roland H. A sequence of inequalities for certain sets of concurrent cevians. (82z:51010)
- Fearnley-Sander, Desmond A royal road to geometry. (82g:01025)
- (Koczyk, H.) See Lewandowski, Zbigniew, (82m:51026)
- Kostrikin, A. I. (with Manin, Ju. I.) ★Линейная алгебра в геометрии. (Russian) [Linear algebra and geometry] (82i:00008)
- (Kowalewski, Adam) See Lewandowski, Zbigniew, (82m:51026)
- Lewandowski, Zbigniew ★Geometria wykreślna. (Polish) [Descriptive geometry] (82m:51026)
- Manin, Ju. I. See Kostrikin, A. I., (82i:00008)
- McDonough, T. P. Two group isomorphisms and a little projective geometry. (82j:20001)

- (Milnor, Tilla Klotz) See **Selected papers: Geometry**, (82c:01041)
- Neumann, Maria Über einige regelmäßige prismatische Flächen mit gemeinsamen Ebenen. (82c:51033)
- Neumann, Peter M. (with Stoy, Gabrielle A.; Thompson, E. C.) ★Groups and geometry. Vol. I. (82j:20002a)
(with Stoy, Gabrielle A.; Thompson, E. C.) ★Groups and geometry. Vol. II. (82j:20002b)
- Otto, Edward See Otto, Franciszek, (82k:51019)
- Otto, Franciszek (with Otto, Edward) ★Podręcznik geometrii wykresnej. (Polish) [Textbook of descriptive geometry] (82k:51019)
- Pedoe, Dan On geometrical matters. (82c:00011)
- Spallek, Karlheinz ★Kurven und Karten. (German) [Curves and maps] (82g:53002) (Stehney, Ann K.) See **Selected papers: Geometry**, (82c:01041)
- Stoy, Gabrielle A. See Neumann, Peter M.; et al., (82j:20002a) and (82j:20002b)
- Szczerba, Lesław W. ★O mierze Jordana. (Polish) [Jordan content] (82m:28008)
- Thompson, E. C. See Neumann, Peter M.; et al., (82j:20002a) and (82j:20002b)
- Geometry ★Selected papers on geometry. (82c:01041)
- Selected papers:**
Geometry ★Selected papers on geometry. (82c:01041)

51-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

- Booss, Bernhelm Quantitative Analyse geometrischer Objekte. (82b:51003)

51-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- (Artobolevskii, I. I.) See Bogoljubov, O. M., (82b:01036)
- (Bartholins, Erasmus) See Cuvelier, Pierre, (82f:01180)
- (Bašmakova, I. G.) See History and methodology of the natural sciences, (82c:01004)
- Bogoljubov, O. M. ★Гаспар Монж (1746-1818). (Russian) [Gaspard Monge (1746-1818)] (82b:01036)
- Bruins, Evert M. Duplication and trisection. (82f:01005)
- Buchwald, Jed Z. Experimental investigations of double refraction from Huygens to Malus. (82c:01023)
- Cook, Ian Geometry for a carpenter in 1800. (82k:01021)
- Cuvelier, Pierre Les *Experimenta crystallici Islandici disclastici* d'Erasmie Bartholin. (English summary) (82f:01180)
- (Ehrmann, H. A.) See Gaiduk, Ju. M., (82f:01046)
- Fiocca, Alessandra Malfatti's problem in nineteenth-century mathematical literature. (Italian. English summary) (82b:01024)
- Gaiduk, Ju. M. H. A. Ehrmann's role in the dissemination of N. I. Lobačevskii's ideas. (Russian. English summary) (82f:01046)
- (ibn al-Haytham, Hasan) See Rashed, Roshdi, (82b:01009)
- Lange, Lester H. Hommage à Archimède. (English) (82k:01009)
- Laserna, Mario Frege's search for a Kantian foundation of geometry. (82b:00009)
- (Leibniz, Gottfried Wilhelm) See Taton, René, (82f:01020)
- (Lobačevskii, N. I.) See Gaiduk, Ju. M., (82f:01046)
- Maracchia, Silvio Aristotle and incommensurability. (Italian. English and French summaries) (82f:01008)
- Mascheroni, L. ★Géométrie du compas. (French) [Geometry with the compass] (82m:01081)
- (Monge, Gaspard) See Bogoljubov, O. M., (82b:01036)
- (Pierru, C.) See Mascheroni, L., (82m:01081)
- (Pierru, J.) See Mascheroni, L., (82m:01081)
- Prvanović, Mileva 150 years after the discovery of non-Euclidean geometry. (Serbo-Croatian) (82f:01053)
- Rashed, Roshdi Ibn al-Haytham's construction of the regular heptagon. (Arabic) (82b:01009)
- (Reichardt, Hans) See Toth, Imre, (82g:01029)
- Rubin, Michael Architecture and geometry. (French summary) (82c:01005)
- (Rybnikov, K. A.) See History and methodology of the natural sciences, (82c:01004)
- Széniassy, Barna Remarks on Gauss's work on non-Euclidean geometry. (Hungarian) (82m:01049)
- Taton, René L'initiation de Leibniz à la géométrie (1672-1676). (82f:01020)
- (Tjulina, I. A.) See History and methodology of the natural sciences, (82c:01004)
- Toth, Imre Spekulationen über die Möglichkeit eines nicht euklidischen Raumes vor Einstein. (82c:00030)
Wann und von wem wurde die nichteuklidische Geometrie begründet?
Bemerkungen zu Hans Reichardts *Gauß und die nichteuklidische Geometrie* [Teubner, Leipzig, 1976; MR 58 #27040]. (82g:01029)
- Biography:**
Bartholins, Erasmus See Cuvelier, Pierre, (82f:01180)
- History and methodology of the natural sciences ★История и методология естественных наук. Вып. XXV. (Russian) [History and methodology of the natural sciences. No. XXV] (82c:01004)
- Natural sciences ★История и методология естественных наук. Вып. XXV. (Russian) [History and methodology of the natural sciences. No. XXV] (82c:01004)
- 51-04 Explicit machine computation and programs (not the theory of computation or programming)
- Afanas'ev, G. K. (with Lebedev, V. I.; Oranskii, A. M.) On the measurement of distance between a point and a given straight line on a plane. (Russian) 82f:51001
- Booss, Bernhelm Quantitative Analyse geometrischer Objekte. 82b:51003
- Lebedev, V. I. See Afanas'ev, G. K.; et al., 82f:51001

- Linkwitz, K. Least-squares methods as a tool to calculate and optimize the design of prestressed cable nets and hanging nets. 82f:51002
- Oranskii, A. M. See Afanas'ev, G. K.; et al., 82f:51001

secondary classifications:

- Abelson, Harold (with diSessa, Andrea A.) ★Turtle geometry. (82j:00001)
- Bertraneu, A. (with Fichet, B.; Fieschi, M.) Un algorithme d'analyse des proximités. (English summary) (See 82f:62004)
- Bolles, Robert C. See Fischler, Martin A., (82f:68091)
- Edelsbrunner, H. (with Maurer, Hermann A.) A space-optimal solution of general region location. (82m:68082)
- Fichet, B. See Bertraneu, A.; et al., (See 82f:62004)
- Fieschi, M. See Bertraneu, A.; et al., (See 82f:62004)
- Fischler, Martin A. (with Bolles, Robert C.) Random sample consensus: a paradigm for model fitting with applications to image analysis and automated cartography. (82f:68091)
- van Leeuwen, Jan (with Wood, Derick) The measure problem for rectangular ranges in d -space. (82k:68018)
- Lipski, Witold, Jr. (with Preparata, Franco P.) Finding the contour of a union of iso-oriented rectangles. (82c:68062)
(with Preparata, Franco P.) Erratum: "Finding the contour of a union of iso-oriented rectangles" [J. Algorithms 1 (1980), no. 3, 235-246; MR 82c:68062]. (82k:68059)
- Markowsky, George (with Wesley, Michael A.) Fleshing out wire frames. (82f:68035)
- Maurer, Hermann A. See Edelsbrunner, H., (82m:68082)
- Preparata, Franco P. See Lipski, Witold, Jr., (82c:68062) and (82k:68059)
- diSessa, Andrea A. See Abelson, Harold, (82j:00001)
- Sieber, Helmut Die Berechnung von π nach Legendre—ein Verfahren für Taschenrechner mit Verallgemeinerungen. (82c:51005)
- Tilove, Robert Bruce Set membership classification: a unified approach to geometric intersection problems. (82c:68063)
- Wesley, Michael A. See Markowsky, George, (82f:68035)
- Wood, Derick See van Leeuwen, Jan, (82k:68018)

51-06 Proceedings, conferences, etc.

- (Plaumann, Peter) See Geometry—von Staudt's point of view, 82c:51005
- (Strambach, Karl) See Geometry—von Staudt's point of view, 82c:51005
- Bad Windsheim ★Geometry—von Staudt's point of view. 82c:51005
- Geometry—von Staudt's point of view ★Geometry—von Staudt's point of view. 82c:51005
- NATO Advanced Study Institute:
Geometry—von Staudt's Point of View ★Geometry—von Staudt's point of view. 82c:51005
- secondary classifications:
- Graz ★12. Steiermärkisches Mathematisches Symposium. (German) [Twelfth Styrian Mathematical Symposium] (82f:52003)
- Symposium:
Styrian Mathematical ★12. Steiermärkisches Mathematisches Symposium. (German) [Twelfth Styrian Mathematical Symposium] (82f:52003)

51Axx Linear incidence geometry

51A05 General theory and projective geometries

- Civolani, N. Hyperfree extensions of partial Klingenberg planes. 82f:51003
- Fearnley-Sander, Desmond Affine geometry and exterior algebra. 82b:51004
- Joussen, Jakob On the construction of Archimedean orders of a free plane. 82g:51001
- Kulkarni, Mangala Fundamental theorem of projective geometry over a commutative ring. 82m:51001
- Makoha, A. N. A linear complex of planes associated with the trivector type (886; 410). (Russian) 82g:51002
- Sprague, Alan P. Incidence structures whose planes are nets. 82m:51002
- Witczyński, Krzysztof Generalized Pappus theorem in the projective space P^n . (Russian summary) 82f:51004

secondary classifications:

- Garner, Lynn E. ★An outline of projective geometry. (82j:51001)
- Gibert, K. Ja. Riemann surfaces of a type of function of a dual variable. (Russian) (82b:30059)
- Sorace, Orazio Pappian properties in non-Desarguesian planes. (Italian) (82m:51008)

51A10 Homomorphism, automorphism and dualities

- Kaerlein, Gerd Zur Isomorphie vektorieller Gruppen und affiner Liniengeometrien. [On the isomorphism of vector groups and affine line geometries] 82m:51003

51A15 Structures with parallelism

- Arnold, Hans-Joachim Konstruktion von in zwei Punkten homogenen, distributiven Spernerschen Ebenensternen. (English summary) [Construction of two-point homogeneous, distributive Sperner spaces] 82k:51002
- Herzer, Armin On characterisations of kinematic spaces by parallelisms. 82f:51001
- Korchmaros, Gábor-Gabriele (with Marchi, Mario) Loops with partitions and André structures. (Italian. English summary) 82c:51002
- Marchi, Mario On a special case of immersion between Sperner spaces. (Italian. English summary) 82m:51005

See also Korchmáros, Gábor-Gabriele, 82i:51002

Pickert, Günter Partial planes with exactly two complete parallel classes. 82e:51006

secondary classifications:

Kusak, Eugeniusz A new approach to dimension-free affine geometry. (Russian summary) (82j:51004)

51A20 Configuration theorems

Bohdanowicz-Grochowska, J. (with Bottema, O.; Grochowski, B.) Many-fold points of the oblique projection of a curve of order n . 82i:51003

Bottema, O. See Bohdanowicz-Grochowska, J.; et al., 82i:51003

Bröcker, Ludwig Charakterisierung von reellen Kurven dritten Grades. 82g:51003

Goodman, Jacob E. Proof of a conjecture of Burr, Grünbaum, and Sloane. 82b:51005

Grochowski, B. See Bohdanowicz-Grochowska, J.; et al., 82i:51003

Hohenberg, Fritz Geschlossene gleichseitige Polygone, deren Ecken abwechselnd einem Kreis und einer Geraden angehören. 82b:51006

Kantor, William M. Generalized quadrangles associated with $G_2(q)$. 82b:51007

Metelka, Václav On certain planar configurations $(12_4, 16_3)$ containing B , C and E points and on singular configurations. (Czech. German summary) 82e:51007

Snapper, Ernst An affine generalization of the Euler line. 82b:51003

secondary classifications:

Lefèvre-Percy, Christiane An extension of a theorem of G. Tallini. (82c:05030)

Ruberg, Stephen J. The tree planting problem on a sphere. (82f:05023)

51A25 Algebraization [See also 12Kxx, 20N10.]

Arnold, Hans-Joachim Richtungsgebren. 82b:51008

Lizzio, Angelo General ternary systems and involutory perspectivities in translation planes. (Italian) 82i:51004

secondary classifications:

Löhms, J. See Sorgsepp, L., (82m:30050)

Sorgsepp, L. (with Löhms, J.) Binary and ternary sedenions. (82m:30050)

Sprague, Alan P. Incidence structures whose planes are nets. (82m:51002)

51A30 Desarguesian and Pappian geometries

Carter, David S. (with Vogt, Andrew) Collinearity-preserving functions between Desarguesian planes. 82b:51009

(with Vogt, Andrew) Collinearity-preserving functions between Desarguesian planes. 82c:51006

Ellers, Erich W. Defining relations for the equiaffine group. 82j:51003

Faina, Giorgio (with Korchmáros, Gábor-Gabriele) A class of ovals in a Desarguesian plane of even order that lead to an inversive plane. (Italian. English summary) 82m:51006

Korchmáros, Gábor-Gabriele See Faina, Giorgio, 82m:51006

Pomilio, Isabella Anastasia Immersion of metric linear spaces of dimension four into nonlinear spaces of dimension three. (Italian. English summary) 82b:51004

Vogt, Andrew See Carter, David S., 82b:51009 and 82c:51006

Włodarski, Ludomir On the Pappus, Desargues and related theorems of affine geometry. (Russian summary) 82b:51005

secondary classifications:

Abatangelo, L. Maria (with Raguso, Grazia) A characterization of the closed arcs contained in a conic of a Pascal plane of characteristic two. (Italian. English summary) (82b:51016)

André, Johannes Eine geometrische Kennzeichnung imprimitiver Frobeniusgruppen. [A geometric characterization of imprimitive Frobenius groups] (82j:20007)

Kusak, Eugeniusz A new approach to dimension-free affine geometry. (Russian summary) (82j:51004)

Raguso, Grazia See Abatangelo, L. Maria, (82b:51016)

Rink, R. Spezielle Translationsebenen und ihre Homomorphismen. (82b:51007)

51A35 Non-Desarguesian affine and projective planes

Bartolotti, Adriano (with Lunardon, Guglielmo) A class of unitals in Δ -planes. (Italian) 82a:51002

Biliotti, Mauro Projective planes with subplanes satisfying prescribed conditions. (Italian. English summary) 82c:51007

Hering, Christoph Finite collineation groups of projective planes containing nontrivial perspectivities. 82i:51005

Korchmáros, Gábor-Gabriele Example of a chain of circles on an elliptic quadric of $PG(3, q)$, $q = 7, 11$. 82j:51005

Lieber, Robert A. Autotopism group representations. 82g:51004

Lotta, Maria The M -epimorphic images of an M^n -plane. (Italian. English summary) 82m:51007

Lunardon, Guglielmo See Bartolotti, Adriano, 82a:51002

Ostrom, T. G. Conicoids: conic-like figures in non-Pappian planes. 82j:51006

Sorace, Orazio Pappian properties in non-Desarguesian planes. (Italian) 82m:51008

secondary classifications:

Foulser, D. A. Some translation planes of order 81. (82i:51006)

Joussen, Jakob Konstruktion archimedischer Anordnungen von freien Ebenen. (82k:51011)

Thomsen, Momme Johs Near-rings with right inverse property. (82a:16037)

51A40 Translation planes and spreads

Bartolotti, Federico On a class of planes introduced by T. G. Ostrom. (Italian. English summary) 82a:51003

Basile, Alessandro (with Brutti, Paolo) Planes and ovals. 82a:51004

Biliotti, Mauro On the derived planes of Desarguesian planes. (Italian. English summary) 82b:51010

Brutti, Paolo See Basile, Alessandro, 82a:51004

Büttner, Wolfram On translation planes containing $Sz(q)$ in their translational complement. 82b:51006

Dugas, Manfred Die Kollineationsgruppe verallgemeinerter André-Ebenen mit Homologien. 82g:51005

Foulser, D. A. Some translation planes of order 81. 82i:51006

Gerla, Giangiacomo (with Lettieri, Ada) Near-fields of infinite dimension over their own nucleus. (Italian. English summary) 82e:51008

Grundhöfer, Theo Eine Charakterisierung ableitbarer Translationsebenen. 82j:51007

Jha, Vikram (with Ostrom, T. G.) On u -groups acting on vector spaces and spreads with characteristic p . 82m:51009

On the derivability of field transitive quasifields. 82b:51003

Johnson, Norman Lloyd (with Ostrom, T. G.) Translation planes of characteristic two in which all involutions are Baer. 82i:51007

The translation planes of Ott-Schaeffer. 82i:51008

Kühlbrandt, Harold On sharply 2-transitive permutation sets. 82i:51009

Kuppuswamy Rao, K. See Narayana Rao, M. L., 82m:51010

Lettieri, Ada See Gerla, Giangiacomo, 82e:51008

Lunardon, Guglielmo Derivable translation planes. (Italian) 82a:51005

Mäurer, Helmut Symmetries of quadrics. 82i:51010

Narayana Rao, M. L. (with Kuppuswamy Rao, K.) Full collineation group of Foulser's flag transitive plane of order 25. 82m:51010

Ostrom, T. G. Translation planes of dimension two with odd characteristic. 82g:51006

Translation planes of even order in which the dimension has only one odd factor. 82b:51011

See also Johnson, Norman Lloyd, 82i:51007 and Jha, Vikram, 82m:51009

Rink, R. Spezielle Translationsebenen und ihre Homomorphismen. 82b:51007

Ronan, Mark A. Coverings and automorphisms of chamber systems. 82e:51009

Vincenti, Rita The collineations group of a translation plane and the collineations group of an affine geometry. 82g:51007

Wilke, F. W. An algorithmic search for replaceable translation nets. 82i:51011

A nonuniform replaceable net in the quaternion plane. 82b:51008

secondary classifications:

Bilinski, Stanko Die Invarianten einer diskreten Transformationsgruppe endlicher Ordnung. (Serbo-Croatian summary) (82b:20002)

Davis, Elwyn H. Translation planes of order 25 with nontrivial X - OY perspectivities. (82d:05039)

See also Satyanarayana, K.; et al., (82c:05032)

Hähl, Hermann Achtdimensionale lokalkompakte Translationsebenen mit großen Streckungsgruppen. (82c:51020)

Achtdimensionale lokalkompakte Translationsebenen mit großen kompakten Kollineationsgruppen. (English summary) (82c:51021)

Kuppuswamy Rao, K. See Satyanarayana, K., (82c:05032)

Lieber, Robert A. Autotopism group representations. (82g:51004)

(Narayana Rao, M. L.) See Satyanarayana, K.; et al., (82c:05032)

Ostrom, T. G. Finite translation planes and group representation. (82b:20018)

Payne, S. E. (with Thas, Joseph A.) Moufang conditions for finite generalized

quadrangles. (82k:05031)

Quaisser, Erhard Zum Aufbau affiner Ebenen aus dem Spiegelungsbegriff. (82k:51021)

Satyanarayana, K. (with Kuppuswamy Rao, K.) A note on a paper of M. L. Narayana Rao and E. H. Davis: "Construction of translation planes from t -spread sets" [J. Combin. Theory Ser. A 14 (1973), 201-208; MR 47 #3202]. (82c:05032)

Thas, Joseph A. See Payne, S. E., (82k:05031)

51A45 Incidence structures imbeddable into projective geometries

Kist, Günter Peter Projektiver Abschluß 2-gelochter Räume. 82c:51008

Lefèvre-Percy, Christiane Polar spaces embedded in a projective space. 82i:51012

Ljah, I. V. Nonproper collineations in algebraic nets. (Russian) 82i:51013

secondary classifications:

Alexander, Ralph Planes for which the lines are the shortest paths between points. (82d:53042)

Arnold, Hans-Joachim Richtungsgebren. (82b:51008)

Bartolotti, Adriano (with Lunardon, Guglielmo) A class of unitals in Δ -planes. (Italian) (82a:51002)

Batten, Lynn Margaret (with Totten, Jim) On a class of linear spaces with two consecutive line degrees. (82b:05012)

Linear spaces with line range $(n-1, n, n+1)$ and at most n^2 points. (82d:05044)

Herzer, Armin Büschelsätze zur Charakterisierung projektiv darstellbarer Zykelebenen. (82b:51012)

On characterisations of kinematic spaces by parallelisms. (82i:51001)

Hirschfeld, J. W. P. (with Thas, Joseph A.) The characterization of projections of quadrics over finite fields of even order. (82b:51016)

Lunardon, Guglielmo See Bartolotti, Adriano, (82a:51002)

Metelka, Václav On certain planar configurations $(12_4, 16_3)$ containing B , C and E points and on singular configurations. (Czech. German summary) (82e:51007)

Pomilio, Isabella Anastasia Immersion of metric linear spaces of dimension four into nonlinear spaces of dimension three. (Italian. English summary) (82b:51004)

Thas, Joseph A. See Hirschfeld, J. W. P., (82b:51016)

Totten, Jim See Batten, Lynn Margaret, (82b:05012)

51A99 None of the above, but in this section

- Erdős, Paul Some combinational problems in geometry. **82d:51002**
 Harborth, Heiko (with Mengersen, Ingrid) Geradenanordnungen mit maximaler Anzahl
 vierseitiger Flächen. **82e:51010**
 Kaya, Rüstem Optical fragments of the real affine plane. (Turkish summary) **82h:51009**
 Mengersen, Ingrid See Harborth, Heiko, **82e:51010**

secondary classifications:

- Abbasov, N. T. Structure of algebras of biquasi-alternations and fundamental involutions in
 these algebras. (Russian) **(82j:15026)**
 Croft, H. T. (with Falconer, K. J.) Lines cutting convex sets in the plane. **(82f:52005)**
 Falconer, K. J. See Croft, H. T., **(82f:52005)**
 James, D. G. Projective geometry for orthogonal groups. **(82c:10025)**

51Bxx Nonlinear incidence geometry

51B05 General theory

- Herzer, Armin Büschelsätze zur Charakterisierung projektiv darstellbarer Zykelebenen.
82h:51012
 Schreiber, Peter Axiomatischer Aufbau der sphärischen Geometrie. **82h:51010**

secondary classifications:

- Hölz, Günther Zur S-Darstellbarkeit endlicher lokal-affiner Kreisräume. (English
 summary) **(82f:51008)**
 Zeitler, Herbert Quadratische Mengen in endlichen projektiven Räumen. **(82h:05041)**

51B10 Möbius geometries

- Karzel, Helmut (with Kist, Günter Peter; Kroll, Hans-Joachim) Burau-Geometrien.
82a:51006
 Khalifah, Mohammed F. Cardinal number of the lines in semiprojective spaces. (Arabic
 summary) **82b:51013**
 Kist, Günter Peter See Karzel, Helmut; et al., **82a:51006**
 Kroll, Hans-Joachim See Karzel, Helmut; et al., **82a:51006**
 Lang, Konrad Kennzeichnung von Möbius-Ebenen durch Spiegelungsrelationen.
 [Characterization of Möbius planes by reflection relations] **82j:51009**
 Maurer, Helmut (with Metz, Rudolf; Nolte, Wolfgang) Die Automorphismengruppe der
 Möbiusgeometrie einer Körpererweiterung. **82c:51009**
 Metz, Rudolf See Maurer, Helmut; et al., **82c:51009**
 Nolte, Wolfgang See Maurer, Helmut; et al., **82c:51009**
 Schaeffer, Helmut Zur Möbiusgeometrie über Alternativkörpern. **82j:51010**
 Wilker, John B. Inversive geometry and certain chains of circles. **82j:51011**

secondary classifications:

- Pomilio, Isabella Anastasia Immersion of metric linear spaces of dimension four into
 nonlinear spaces of dimension three. (Italian. English summary) **(82h:51004)**

51B15 Laguerre geometries

- Artzy, R. Some automorphisms of Laguerre planes. **82c:51004**
 Kaya, Rüstem A class of ovoidal Laguerre planes. (Turkish summary) **82m:51004**
 Schaeffer, Helmut Automorphisms of Laguerre-geometry and cone-preserving mappings
 of metric vector spaces. **82i:51014**

51B20 Minkowski geometries

- Benz, Walter A Beckman Quarles type theorem for plane Lorentz transformations.
82i:51015
 Buiculescu-Massier, Doina On the Lorentz transformation. (Romanian) **82a:51007**
 Dornfeld, Engelbert (with Wochnik, Helmut) Angles in the Lorentz group. (Polish.
 German summary) **82g:51008a**
 (with Wochnik, Helmut) Axial symmetries in the Lorentz group. (Polish. German
 summary) **82g:51008b**
 Hartmann, Erich Beispiele nicht einbettbarer reeller Minkowski-Ebenen. **82h:51011**
 Radó, F. On the characterization of plane affine isometries. **82g:51009**
 Wefelscheid, Heinrich Verralgemeinerte Minkowski-Geometrie. **82h:51014**
 Wochnik, Helmut See Dornfeld, Engelbert, **82g:51008a** and **82g:51008b**

secondary classifications:

- Benz, Walter Eine Beckman-Quarles-Charakterisierung der Lorentztransformationen des
 R^n . **(82h:51022)**
 Briginshaw, A. J. Elementary proof of Zeeman's theorem. **(82c:83002)**
 Frescura, F. A. M. (with Hiley, B. J.) Geometric interpretation of the Pauli spinor.
(82c:81047)
 Gomis, J. (with Pons, J. M.) Poincaré transformations and Galilei transformations.
(82a:83003)
 Gué, A. K. On the bases of space-time geometry. (Russian) **(82g:51021)**
 Gurov, L. G. Stability of Lorentz transformations in n -dimensional space. (Russian)
(82i:53052)
 Hamilton, J. Dwayne The rotation and precession of relativistic reference frames.
(82d:83006)
 Hiley, B. J. See Frescura, F. A. M., **(82c:81047)**
 Laback, O. ★Topologies in general space-time. **(82j:83042)**
 On the timelike relation in space-time. **(82c:83034)**
 Lester, June A. The Beckman-Quarles theorem in Minkowski space for a spacelike

square-distance. **(82c:83007)**

- Percy, Nicolas Finite Minkowski planes in which every circle-symmetry is an
 automorphism. **(82j:51023)**
 Pfeffer, W. F. Lorentz transformations of a Hilbert space. **(82h:53037)**
 Pons, J. M. See Gomis, J., **(82a:83003)**
 Ray, Dipankar Comment on: "On the possibility of a three-temporal Lorentz
 transformation" [Phys. Lett. A **70** (1979), no. 2, 87-88] by G. Ziino. **(82a:83005b)**
 Sjödin, Torgny A note on Poincaré's principle and the behaviour of moving bodies and
 clocks. **(82a:83004)**
 Wefelscheid, Heinrich Zur Planarität von KT-Fastkörpern. **(82h:12026)**
 Williams, Gareth A discussion of the relation "closer than" within simple regions of
 curved space-time. **(82g:83022)**
 Ziino, G. On the possibility of a three-temporal Lorentz transformation. **(82a:83005a)**
 See also Ray, Dipankar, **(82a:83005b)**

51B25 Lie geometries

- Rigby, J. F. On the Money-Coutts configuration of nine antitangent cycles. **82h:51012**

secondary classifications:

- Ronan, Mark A. Semiregular graph automorphisms and generalized quadrangles.
(82d:05047)

51B99 None of the above, but in this section

- Halder, Heinz-Richard Regular permutation geometries. **82c:51011**
 Ronan, Mark A. A combinatorial characterization of the dual Moufang hexagons.
82c:51016

secondary classifications:

- Földes, Stéphane (with Singhi, N. M.) A nonconstructible projective plane. **(82d:03052)**
 Singhi, N. M. See Földes, Stéphane, **(82d:03052)**

51C05 Ring geometry (Hjelmslev, Barbilian, etc.)

- Abbasov, N. T. Interpretation of elliptic and hyperbolic spaces over algebras of
 quasialternations. (Russian) **82c:51012**
 Symplectic spaces over the algebras of quasialternations ${}^{0,1}A\mathbb{Q}$, ${}^{1,1}A\mathbb{Q}$. (Russian)
82c:51013
 Fadó, F. Affine geometries and affine Barbilian structures. (See **82h:53003**)
 Groze, V. (with Vasu, A.) Affine structures over an arbitrary ring. (Romanian summary)
82h:51013
 Knüppel, Frieder (with Kunze, Michael) Reguläre Hjelmslev-Homomorphismen.
82m:51011
 Kunze, Michael See Knüppel, Frieder, **82m:51011**
 Lantz, David C. Uniqueness of Barbilian domains. **82c:51017**
 Lorimer, J. W. Locally compact Hjelmslev planes. **82c:51014**
 Machala, František Fundamentalsätze der projektiven Geometrie mit Homomorphismen.
 (Czech summary) **82a:51005**
 Radó, F. Affine Barbilian structures. **82c:51015**
 Seier, Werner Zur Translationstransitivität in affinen Hjelmslev-Ebenen. **82h:51015**
 Die Quasitranslationen desarguesscher affiner Hjelmslev-Ebenen. **82j:51012**
 Vasu, A. See Groze, V., **82h:51013**

secondary classifications:

- Bachmann, Friedrich Rigidity in the geometry of involutory elements of a group.
(82d:51005)
 Kunze, Michael Angeordnete Hjelmslevsche Geometrie. **(82k:51012)**
 Sane, Sharad S. Some new invariant pairs $(i, 3)$ for projective Hjelmslev planes.
(82c:51013)

51Dxx Geometric closure systems

51D05 Abstract (Maeda) geometries

51D10 Abstract geometries with exchange axiom

- Bottema, O. Equi-affinities in three-dimensional space. **82c:51010**

secondary classifications:

- Thomsen, Momme Johs Near-rings with right inverse property. **(82a:16037)**

51D15 Abstract geometries with parallelism

- Cippo, Claudio Perelli See Marchi, Mario, **82j:51013**
 Karzel, Helmut Rectangular spaces. **82d:51003**
 Kusak, Eugeniusz A new approach to dimension-free affine geometry. (Russian summary)
82j:51004
 Marchi, Mario (with Cippo, Claudio Perelli) On a particular class of S -spaces. (Italian.
 English summary) **82j:51013**
 Stanik, Rotraut Ein Beitrag zur Axiomatik metrisch-affiner Ebenen von Charakteristik
 $\neq 2$. **82c:51011**

51D20 Combinatorial geometries [See also 05B25.]

- Burdakov, V. M. (with Višnevskii, V. V.) Structures in the ruled geometry of spaces with

degenerate absolute. (Russian) **82g:51010**
 Vinetskiĭ, V. V. See Burdakov, V. M., **82g:51010**

secondary classifications:

- Cippo, Claudio Perelli See Marchi, Mario, **(82j:51013)**
 Cordovil, Raul Sur les orientations acycliques des géométries orientées de rang trois. **(82c:05037)**
 De Meur, Gisèle Fischer subspaces of Hermitian manifolds. **(82e:51017)**
 Goodman, Jacob E. (with Pollack, Richard) Proof of Grünbaum's conjecture on the stretchability of certain arrangements of pseudolines. **(82m:05026)**
 Hamada, Noboru (with Tamari, Fumikazu) Construction of maximal t -linearly independent sets. **(82g:05027)**
 (with Tamari, Fumikazu) On a geometrical method of construction of maximal t -linearly independent sets. **(82g:05028)**
 Marchi, Mario (with Cippo, Claudio Perelli) On a particular class of S -spaces. (Italian. English summary) **(82j:51013)**
 Pollack, Richard See Goodman, Jacob E., **(82m:05026)**
 Tamari, Fumikazu See Hamada, Noboru, **(82g:05027)** and **(82g:05028)**
 White, Neil L. The transcendence degree of a coordinatization of a combinatorial geometry. **(82e:05054)**

51D25 Lattices of subspaces [See also 05B35.]

51D30 Continuous geometries and related topics

51D99 None of the above, but in this section

secondary classifications:

Seeland, Horst ★Algorithmische Theorien und konstruktive Geometrie. (German) [Algorithmic theories and constructive geometry] **(82d:03034)**

51Exx Finite geometry

secondary classifications:

- (Cameron, Peter J.) See Finite geometries and designs, **(82g:05003)**
 (Hirschfeld, J. W. P.) See Finite geometries and designs, **(82g:05003)**
 (Hughes, D. R.) See Finite geometries and designs, **(82g:05003)**
 Chelwood Gate ★Finite geometries and designs. **(82g:05003)**
 Combinatorial structures of configurations ★Combinatorial structures of configurations. (Japanese) **(82g:05002)**
 Conference:
 Isle of Thorns, Finite Geometries and Designs ★Finite geometries and designs. **(82g:05003)**
 Finite geometries and designs ★Finite geometries and designs. **(82g:05003)**
 Symposium:
 Combinatorial Structures of Configurations ★Combinatorial structures of configurations. (Japanese) **(82g:05002)**

51E05 General block designs [See also 05B05.]

secondary classifications:

- Bruen, Aiden A. Blocking sets and skew subspaces of projective space. **(82j:05025)**
 Chan, Agnes Hui (with Ray-Chaudhuri, D. K.) Embedding of a pseudo-residual design into a Möbius plane. **(82k:05018)**
 Nicoletti, Giorgio Polynomials and incidence structures. (Italian. English summary) **(82j:05011)**
 Ray-Chaudhuri, D. K. See Chan, Agnes Hui, **(82k:05018)**
 Ustimenko-Bakumovskii, V. A. Strongly regular graphs invariant with respect to groups $[Y_n]^{n-1}$ when $n \geq 3$. (Russian) **(82f:05053)**

51E10 Steiner systems

- Bertani, Laura On some incidence structures. **82j:51014**
 de Resmini, Mariahuia J. On k -sets of type (m, n) in a Steiner system $S(2, l, v)$. **82e:51018**

secondary classifications:

- Andersen, Lars Døvling (with Hilton, A. J. W.; Mendelsohn, E.) Embedding partial Steiner triple systems. **(82a:05010)**
 Assmus, E. F., Jr. (with Novillo Sardi, J. E.) Generalized Steiner systems of type $3-(v, \{4, 6\}, 1)$. **(82c:05012)**
 Cho, Chung Je On cyclic Steiner quadruple systems. **(82b:05024)**
 Colbourn, Charles J. (with Colbourn, Marlene J.) A recursive construction for infinite families of cyclic SQS. **(82b:05009)**
 Colbourn, Marlene J. See Colbourn, Charles J., **(82b:05009)**
 Diconenzo, Vincenzo On a class of finite metric-projective spaces of even order and their motion groups. (Italian summary) **(82d:51006)**
 Hartman, Alan Doubly and orthogonally resolvable quadruple systems. **(82f:05012)**
 Tripling quadruple systems. **(82e:05028)**
 Hilton, A. J. W. See Andersen, Lars Døvling; et al., **(82a:05010)**
 Mathon, Rudolf A. (with Phelps, Kevin T.; Rosa, Alexander) A class of Steiner triple systems of order 21 and associated Kirkman systems. **(82k:05022)**
 Mendelsohn, E. See Andersen, Lars Døvling; et al., **(82a:05010)**
 Novillo Sardi, J. E. See Assmus, E. F., Jr., **(82c:05012)**
 Phelps, Kevin T. On the construction of cyclic quadruple systems. **(82k:05020)**

(with Rosa, Alexander) Steiner triple systems with rotational automorphisms. **(82a:05018)**

See also Mathon, Rudolf A.; et al., **(82k:05022)**

- Rosa, Alexander See Phelps, Kevin T., **(82a:05018)** and Mathon, Rudolf A.; et al., **(82k:05022)**
 Saxl, Jan On points and triples of Steiner triple systems. **(82j:20012)**
 Scappellato, Raffaele On the existence of Steiner functions. (Italian. English summary) **(82c:20048)**
 Sloane, N. J. A. (with Thompson, John G.) The nonexistence of a certain Steiner system $S(3, 12, 112)$. **(82m:05023)**
 Stanton, R. G. A conjecture on quintuple systems. **(82c:05021)**
 Thompson, John G. See Sloane, N. J. A., **(82m:05023)**

51E15 Affine and projective planes

- Anstee, Richard P. (with Hall, Marshall, Jr.; Thompson, John G.) Planes of order 10 do not have a collineation of order 5. **82c:51012**
 Bachmann, O. On rank 4 projective planes. **82h:51014**
 Basile, Alessandro (with Brutti, Paolo) Γ -derivation and Γ -derived planes. **82g:51011**
 Beutelspacher, Albrecht (with Delandtsheer, Anne) A common characterization of finite projective spaces and affine planes. **82j:51015**
 Bichara, Alessandro (with Korchmáros, Gábor-Gabriele) n^2 -sets in a projective plane which determine exactly $n^2 + n$ lines. **82j:51016**
 Brutti, Paolo See Basile, Alessandro, **82g:51011**
 Cohen, Stephen D. (with Ganley, Michael J.; Jha, Vikram) On transitive automorphism groups of finite quasifields. **82e:51016**
 D'Angelo, Mario On equiaffine planes. **82d:51004**
 Delandtsheer, Anne See Beutelspacher, Albrecht, **82j:51015**
 de Finis, Massimo On k -sets of type (m, n) in projective planes of square order. **82e:51019**
 Ganley, Michael J. See Cohen, Stephen D.; et al., **82e:51016**
 Hall, Marshall, Jr. See Anstee, Richard P.; et al., **82c:51012**
 Janko, Zvonimir (with Tran Van Trung) On projective planes of order 12 which have a subplane of order 3. I. **82f:51005**
 (with Tran Van Trung) On projective planes of order twelve and twenty. **82f:51006**
 (with Tran Van Trung) Projective planes of order 10 do not have a collineation of order 3. **82h:51015**
 (with Tran Van Trung) Projective planes of order 12 do not have a nonabelian group of order 6 as a collineation group. **82j:51017**
 Jeger, M. Geometrie und Kombinatorik. **82k:51006**
 Jha, Vikram See Cohen, Stephen D.; et al., **82e:51016**
 Johnson, Norman Lloyd Some translation planes constructed by multiple derivation. **82j:51012**
 On the solvability of the collineation groups of derivable translation planes. **82j:51008**
 Kallaher, Michael J. A characterization of the Hall planes. **82m:51012**
 Korchmáros, Gábor-Gabriele On n^2 -sets of type $(0, 1, n)$ in projective planes. **82j:51018**
 See also Bichara, Alessandro, **82j:51016**
 Kryš, Jaromír Models of finite affine planes. (Czech. German summary) **82g:51013**
 Thompson, John G. See Anstee, Richard P.; et al., **82c:51012**
 Tischerová, Z. Die Eigenschaften der Ovale in der endlichen projektiven Ebene der Ordnung 16. **82f:51007**
 Tran Van Trung See Janko, Zvonimir, **82f:51005**; **82f:51006**; **82h:51015** and **82j:51017**
 Yff, Peter A subplane partition of the cyclic plane of order 81. (Arabic summary) **82j:51019**

secondary classifications:

- Beth, Thomas The rank of the $AG(2, n)$ incidence matrix over any prime field. **(82d:05037)**
 Brouwer, Andries ★Some unitals on 28 points and their embeddings in projective planes of order 9. **(82c:05024)**
 Cohen, Arjeh M. Geometries originating from certain distance-regular graphs. **(82k:05059)**
 Dehroey, Ingrid Note: a remark on a result of B. Segre concerning pseudoregular points of an elliptic quadric of $AG(2, q)$, q odd. **(82c:05029)**
 Jungnickel, Dieter On balanced regular Hjelmslev planes. **(82g:05029)**
 Kelly, Douglas G. (with Oxley, James G.) Asymptotic properties of random subsets of projective spaces. **(82k:05039)**
 Kestenband, Barbu C. Unital intersections in finite projective planes. **(82h:05013)**
 Liebler, Robert A. Autotopism group representations. **(82g:51004)**
 Ostrom, T. G. Translation planes of dimension two with odd characteristic. **(82g:51006)**
 Elementary abelian 2-groups in finite translation planes. **(82c:05031)**
 Oxley, James G. See Kelly, Douglas G., **(82k:05039)**
 Shult, Ernest E. Permutation groups with few fixed points. **(82j:20011)**
 Thompson, John G. Fixed point free involutions and finite projective planes. (See **82h:20021**)
 Whodarski, Ludomir On the Pappus, Desargues and related theorems of affine geometry. (Russian summary) **(82h:51005)**

51E20 Combinatorial structures in finite projective spaces [See also 05Bxx.]

- Abatangelo, L. Maria (with Raguso, Grazia) A characterization of the closed arcs contained in a conic of a Pascal plane of characteristic two. (Italian. English summary) **82h:51016**
 Bichara, Alessandro On the k -sets of $PG(r, q)$ of class $[0, 1, 2, n]_2$. (Italian. English summary) **82i:51020**

- Buckenhout, Francis (with Totten, Jim) A classification of linear spaces based on quadrangles. III. **82b:51017**
- D'Agostini, Erminia On caps with weighted points in $PG(r, q)$. **82j:51020**
- De Meur, Gisèle Fischer subspaces of Hermitian manifolds. **82e:51017**
- Ferri, Osvaldo A graphical characterization of the set of external points of an oval in a plane Π_q (q odd). (Italian. English summary) **82j:51021**
- Hansen, Sten On configurations in 3-space without elementary planes and on the number of ordinary planes. **82g:51014**
- Hill, Raymond (with Mason, J. R. M.) On (k, n) -arcs and the falsity of the Lunelli-See conjecture. **82m:51013**
- Hirschfeld, J. W. P. (with Thas, Joseph A.) The characterization of projections of quadrics over finite fields of even order. **82b:51016**
(with Thas, Joseph A.) Sets of type $(1, n, q+1)$ in $PG(d, q)$. **82h:51018**
- Lefèvre-Percy, Christiane Quadrilatères généralisés faiblement plongés dans $PG(3, q)$. (English summary) [Generalized quadrangles weakly embedded in $PG(3, q)$] **82m:51014**
- Limbois, Monique A characterisation of the embeddings of $PG(m, q)$ into $PG(n, q')$. **82m:51015**
- Lo Re, Pia Maria (with Mazzocca, Francesco; Olanda, Domenico) Generalized hexagons and polar spaces. (Italian. English summary) **82j:51022**
- Mason, J. R. M. See Hill, Raymond, **82m:51013**
- Mazzocca, Francesco See Lo Re, Pia Maria; et al., **82j:51022**
- Olanda, Domenico See Lo Re, Pia Maria; et al., **82j:51022**
- Raguso, Grazia See Abatangelo, L. Maria, **82h:51018**
- Ronan, Mark A. A note on the ${}^3D_4(q)$ generalized hexagons. **82g:51015**
- Sprague, Alan P. Pasch's axiom and projective spaces. **82h:51019**
- Tallini Scafati, Maria The k -sets of type (m, n) of an affine space $A_{r,q}$. (Italian. English summary) **82h:51020**
- Thas, Joseph A. See Hirschfeld, J. W. P., **82b:51016** and **82h:51018**
- Totten, Jim See Buckenhout, Francis, **82h:51017**

secondary classifications:

- Bierbrauer, Jürgen On minimal blocking sets. **(82d:05038)**
- Brouwer, Andries ★ An inequality in binary vector spaces. **(82c:05040)**
- Cameron, Peter J. Flat embeddings of near $2n$ -gons. **(82j:05033)**
- de Finis, Massimo On k -sets of type (m, n) in projective planes of square order. **(82i:51019)**
- Hughes, D. R. (with Kallaher, Michael J.) On the Knuth semifields. **(82b:05039)**
- Kallaher, Michael J. See Hughes, D. R., **(82b:05039)**
- Kantor, William M. Generalized quadrangles associated with $G_2(q)$. **(82b:51007)**
- Lefèvre-Percy, Christiane Polar spaces embedded in a projective space. **(82i:51012)**
Ensembles de classe $(0, 1, q, q+1)$ de $PG(d, q)$. (English summary) **(82d:05040)**
- Thas, Joseph A. Ovoids and spreads of finite classical polar spaces. **(82g:05031)**
- Welsh, D. J. A. Colourings, flows and projective geometry. **(82h:05002)**

51E25 Finite nonlinear geometries

- Holz, Günther Zur S-Darstellbarkeit endlicher lokal-affiner Kreisräume. (English summary) **82f:51008**
- Ott, Udo Eine Bemerkung über Polaritäten eines verallgemeinerten Hexagons. **82k:51007**
- Percy, Nicolas Finite Minkowski planes in which every circle-symmetry is an automorphism. **82j:51023**

secondary classifications:

- Halder, Heinz-Richard Regular permutation geometries. **(82e:51011)**
- Johnson, Norman Lloyd Some translation planes constructed by multiple derivation. **(82g:51012)**

51E30 Other finite incidence structures [See also 05B30.]

- Batten, Lynn Margaret (with Buckenhout, Francis) Quadriques partielles d'indice deux. [Partial quadrics of index two] **82m:51016**
- Beutelspacher, Albrecht A generalization of Dembowski's theorem on semiplanes. **82i:51021**
- Biliotti, Mauro (with Scarselli, Alessandro) On translation structures with nontrivial dilatations. (Italian. English summary) **82j:51002**
- Buckenhout, Francis See Batten, Lynn Margaret, **82m:51016**
- Fiori, Carla See Quattrocchi, Pasquale, **82f:51009**
- Haemers, Willem (with Roos, Cornelis) An inequality for generalized hexagons. **82g:51016**
- Herzer, Armin (with Lunardon, Guglielmo) Reguli, pseudoreguli and algebraic varieties. (Italian. English summary) **82e:51018**
- Lunardon, Guglielmo See Herzer, Armin, **82e:51018**
- Nicoletti, Giorgio A cyclic finite geometry. (Italian) **82h:51017**
- Quattrocchi, Pasquale (with Fiori, Carla) A result concerning the existence of certain finite Minkowski-2-structures. **82f:51009**
- Roos, Cornelis See Haemers, Willem, **82g:51016**
- Sane, Sharad S. Some new invariant pairs $(t, 3)$ for projective Hjelmslev planes. **82e:51013**
- Scarselli, Alessandro See Biliotti, Mauro, **82j:51002**
- Shult, Ernest E. (with Yanushka, Arthur) Near n -gons and line systems. **82h:51018**
- Yanushka, Arthur On order in generalized polygons. **82g:51017**
See also Shult, Ernest E., **82h:51018**

secondary classifications:

- Assmus, E. F., Jr. (with Novillo Sardi, J. E.) Generalized Steiner systems of type $3-(v, \{4, 6\}, 1)$. **(82i:05012)**

- Debroey, Ingrid (with Thas, Joseph A.) Semipartial geometries in $PG(2, q)$ and $PG(3, q)$. (Italian summary) **(82a:05028)**
- De Meur, Gisèle Fischer subspaces of Hermitian manifolds. **(82e:51017)**
- Jungnickel, Dieter Transitive symmetric nets. **(82j:05037)**
- Löhms, J. See Sorgsepp, L., **(82m:30050)**
- Novillo Sardi, J. E. See Assmus, E. F., Jr., **(82i:05012)**
- Sane, Sharad S. New integer pairs for Hjelmslev planes. **(82d:05043)**
- Sorgsepp, L. (with Löhms, J.) Binary and ternary sedenions. **(82m:30050)**
- Thas, Joseph A. See Debroey, Ingrid, **(82a:05028)**
- Turner, Barbara Fourier's seventeen lines problem. **(82i:01025a)**
- Webster, R. J. A problem of Fourier. **(82i:01025b)**

51E99 None of the above, but in this section

51Fxx Metric geometry

51F05 Absolute planes

- Drumm, Volker Ebene absolute Geometrie über euklidischen Körpern. **82c:51014**
- Farrhi, Bijan A characterization of isometries of absolute planes. **82i:51022**

secondary classifications:

- Kunze, Michael Angeordnete Hjelmslevsche Geometrie. **(82a:51012)**
- Stanik, Rotraut Ein Beitrag zur Axiomatik metrisch-affiner Ebenen von Charakteristik $\neq 2$. **(82c:51011)**

51F10 Absolute spaces

- Heimbeck, Günter Zum Aufbau der absoluten Geometrie nach Ewald. **82b:51019**
- Palman, Dominik Drehzyklen 4. Ordnung (Typus I) des einfach isotropen Raumes. (English and Serbo-Croatian summaries) **82f:51010**
- Pevac, Lazar Characterization of Hilbert spaces by means of best N -nets. (Serbo-Croatian. English summary) **82g:51018**

secondary classifications:

- Bachmann, Friedrich (with Knüppel, Frieder) Starrheit in der Geometrie involutorischer Gruppenelemente. **(82b:20055)**
- Knüppel, Frieder See Bachmann, Friedrich, **(82b:20055)**

51F15 Reflection groups, reflection geometries [See also 20H10, 20H15.]

- Bachmann, Friedrich Rigidity in the geometry of involutory elements of a group. **82d:51005**
- Coxeter, Harold Scott MacDonald Angels and devils. (See **82b:00003**)
- Dicunzio, Vincenzo On a class of finite metric-projective spaces of even order and their motion groups. (Italian summary) **82d:51006**
- Đoković, Dragomir Ž. Relations between reflections in the unitary group and Hermitian hyperquadrics in the complex projective space. **82e:51019**
- Dress, Andreas W. M. On the classification and generation of two- and higher-dimensional regular patterns. **82i:51023a**
Errata to: "On the classification and generation of two- and higher-dimensional regular patterns". **82i:51023b**
- Garit, V. P. Two-dimensional globally discrete groups of symmetry of the semi-Euclidean plane. (Russian) **82m:51017**
- Hansen, Hans Christian An axiomatic geometry with some important interpretations. (Danish) **82h:51021**
- Makarov, V. S. A noncompact partition of ten-dimensional Lobachevskii space. (Russian) **82k:51008**
- Maxwell, George Space groups of Coxeter type. **82k:51009**
- Nothe, Wolfgang Eine projektive Spiegelungsgruppe, welche S -Gruppe ist. (English summary) **82f:51011**
- Palistrant, A. F. See Zamorzaev, A. M., **82g:51019**
- Stölting, Rolf Ebene metrische Geometrien über projektiven Moduln. **82f:51012**
- Stroscher, Christoph Reduktion von Punktspiegelungsprodukten in der ebenen metrischen Geometrie. **82a:51008**
- Tomašić, Vesna Die Eigenschaften der Kegelschnitte durch Spiegelungen geäußert. **82i:51024**
- Wendland, Horst Pseudoeuklidische Räume endlicher Dimension im Aufbau der Geometrie aus dem Spiegelungsbegriff. (Russian and English summaries) **82k:51010**
- Zamorzaev, A. M. (with Palistrant, A. F.) Geometric classification of P -symmetries. (Russian) **82g:51019**
See also All-Union Symposium: Theory of Symmetry and its Generalizations, **82g:51020**
- Zamorzaeva, E. A. Super-crystallographic P -symmetries. (Russian) **82c:51015**
- All-Union Symposium:
Theory of Symmetry and its Generalizations ★ Всесоюзный Симпозиум по Теории Симметрии и ее Обобщениям. (Russian) [All-Union Symposium on the Theory of Symmetry and its Generalizations] **82g:51020**
- Theory of symmetry ★ Всесоюзный Симпозиум по Теории Симметрии и ее Обобщениям. (Russian) [All-Union Symposium on the Theory of Symmetry and its Generalizations] **82g:51020**

secondary classifications:

- Belov, N. V. See Soldatov, E. A.; et al., **(82g:20075)**
- Ellers, Erich W. Generators and relations for classical groups. **(82i:20057)**
Relations in hyperreflection groups. **(82h:20059)**
- Galiulin, R. V. Related kinds of simple forms of crystals. (Russian) **(82c:52007)**
Delaney systems. **(82j:51030)**

Grünbaum, Branko (with Shephard, Geoffrey C.) Patterns on the 2-sphere. (82m:51025) (with Shephard, Geoffrey C.) A hierarchy of classification methods for patterns. (82j:05048)

Harker, David The three-colored three-dimensional space groups. (82k:20081)

Heimbeck, Günter Zum Aufbau der absoluten Geometrie nach Ewald. (82b:51019)

Ignatenko, V. F. On algebraic surfaces with symmetry groups A_n , B_n , D_n . (Russian) (82m:14021)

Ilyuhin, V. V. See Soldatov, E. A.; et al., (82g:20075)

Janzer, A. Z-module crystallography. (See 82h:81004)

Knüppel, Frieder (with Kunze, Michael) Reguläre Hjelmlev-Homomorphismen. (82m:51011)

Köhler, Klaus-Joachim On the structure and the determination of n -dimensional partially periodic crystallographic groups. (82j:20093a)

An algorithm for finding the subgroups of n -dimensional crystallographic groups. (82j:20093b)

Kunze, Michael Angeordnete Hjelmlevsche Geometrie. (82k:51012)

See also Knüppel, Frieder, (82m:51011)

Kuz'min, E. A. See Soldatov, E. A.; et al., (82g:20075)

Leonjuk, N. I. (with Mal'eva, L. I.) Use of the Wulff-Delaunay method to assess the habits of crystals. (82d:82073)

Mal'eva, L. I. See Leonjuk, N. I., (82d:82073)

Mihailova, M. A. Finite imprimitive groups generated by pseudoreflections. (Russian) (82d:20046)

Muradjan, R. M. Discrete subgroups of three-dimensional rotation groups. (Russian. English summary) (82j:22009)

Neubüser, Joachim (with Plesken, Wilhelm; Wondratschek, H.) An emendatory discussion on defining crystal systems. (82i:20059)

Plesken, Wilhelm See Neubüser, Joachim; et al., (82i:20059)

Pomilio, Isabella Anastasia Immersion of metric linear spaces of dimension four into nonlinear spaces of dimension three. (Italian. English summary) (82h:51004)

Rasetti, M. (with Regge, Tullio) Dimer covering and Ising model on lattices homogeneous under the icosahedral group. (82i:82065)

Regge, Tullio See Rasetti, M., (82i:82065)

Schwarzenberger, Rolf L. E. \star n -dimensional crystallography. (82e:82018)

Senchal, Marjorie The genesis of growth twins. (82d:82074)

Shephard, Geoffrey C. See Grünbaum, Branko, (82j:05048) and (82m:51025)

Singmaster, David \star Notes on Rubik's "magic cube". (82h:20005a)

\star Notes on Rubik's magic cube. (82h:20005b)

Soldatov, E. A. (with Kuz'min, E. A.; Ilyuhin, V. V.; Belov, N. V.) On the symmetry of an N -dimensional translational lattice. (Russian) (82g:20075)

Terao, Hiroaki Free arrangements of hyperplanes and unitary reflection groups. (82e:32018a)

Generalized exponents of a free arrangement of hyperplanes and

Shepherd-Todd-Brieskorn formula. (82e:32018b)

Wagner, Ascher Determination of the finite primitive reflection groups over an arbitrary field of characteristic not two. II, III. (82g:20076)

Wilker, John B. Topologically equivalent two-dimensional isometries. (82e:20086)

Wondratschek, H. Crystallographic orbits, lattice complexes, and orbit types. (82g:20077)

See also Neubüser, Joachim; et al., (82i:20059)

51F20 Congruence and orthogonality [See also 20H05.]

Benz, Walter Ein Trennungssaxiom in der Orthogonalgeometrie und eine Charakterisierung der reellen Ebene. (82h:51023)

Eine Beckman-Quarles-Charakterisierung der Lorentztransformationen des \mathbb{R}^n . (82h:51022)

Haruki, Hiroshi On a theorem of inversive geometry. (82b:51020)

Hohenberg, Fritz Besondere gleichseitige Zwölfecke, die sich aus einem Schließungssatz ergeben. (82e:51016)

Pickert, Günter A problem of free mobility. (82e:51020)

Stenius, Erik On the definition of congruence by recursion. (82e:51017)

secondary classifications:

Nolte, Wolfgang Eine projektive Spiegelungsgruppe, welche S -Gruppe ist. (English summary) (82f:51011)

51F25 Orthogonal and unitary groups [See also 20H05.]

Wollny, Wolfgang Dualität von Cayley-Diagramm und Fundamentalbereichspartikell bei den diskreten 1-dimensionalen Bewegungsgruppen. (82h:51024)

secondary classifications:

Goethals, J.-M. (with Seidel, J. J.) Spherical designs. (82h:05014)

Seidel, J. J. See Goethals, J.-M., (82h:05014)

51F99 None of the above, but in this section

Connelly, Robert Conjectures and open questions in rigidity. (82a:51009)

Jarratt, John D. Stability of symmetry in crystal lattice hyperplanes. (82e:51021)

Lester, June A. Conformal spaces. (82e:51022)

Parker, George D. A metric model of plane Euclidean geometry. (82e:51023)

Roth, B. (with Whiteley, Walter) Tensegrity frameworks. (82m:51018)

Rutthotto, Johannes Kennzeichnung verallgemeinerter euklidischer Ebenen durch Ähnlichkeitsrelationen. (English summary) (82e:51024)

Schröder, Eberhard M. Zur Kennzeichnung distanztreuer Abbildungen in nicht-euklidischen Räumen. (English summary) (82h:51025)

Stepaňko, T. A. Invariant metric and affine connection in manifolds of pairs of images of a simplicity. (Russian) (82f:51013)

Whiteley, Walter See Roth, B., (82m:51018)

secondary classifications:

Bolker, Ethan D. (with Roth, B.) When is a bipartite graph a rigid framework? (82c:57003)

Katz, Michael L. Inexact geometry. (82e:03016)

Liang, E. P. T. (with Sachs, R. K.) Cosmology. (82i:83076)

Roth, B. See Bolker, Ethan D., (82c:57003)

Sachs, R. K. See Liang, E. P. T., (82i:83076)

Titiev, Robert J. A locus problem involving the three-dimensional city-block metric. (82b:92047)

51G05 Ordered geometries (ordered incidence structures, etc.)

Joussen, Jakob Konstruktion archimedischer Anordnungen von freien Ebenen. (82k:51011)

Kunze, Michael Angeordnete Hjelmlevsche Geometrie. (82k:51012)

Machala, František Angeordnete affine Klingenberg'sche Ebenen. (82d:51007)

Stanik, Rotraut Anordnung in Rechtecksebenen und Integritätssystemen. (English summary) (82k:51013)

Szmielew, Wanda Concerning the order and the semi-order of n -dimensional Euclidean space. (82d:51008)

secondary classifications:

Guc, A. K. Isotone mappings of disconnectedly ordered Euclidean space. (Russian) (82j:51027)

Osetek, Jerzy On the order of $n+3$ hyperplanes in n -dimensional projective geometry. (82j:51034)

51Hxx Topological geometry

Porteous, Ian R. \star Topological geometry. (82e:51018)

51H05 General theory

Hahl, Hermann Lokalkompakte zusammenhängende Translationsebenen mit großen Sphärenbahnen auf der Translationsachse. (82a:51010)

Kuznecova, T. A. Bisectoctave and disemioctave planes. (Russian) (82a:51011)

secondary classifications:

Ronan, Mark A. Coverings and automorphisms of chamber systems. (82e:51009)

51H10 Topological linear incidence structures

Buchanan, Thomas (with Hahl, Hermann; Löwen, Rainer) Topologische Ovale. (82e:51019)

Hahl, Hermann Achtdimensionale lokalkompakte Translationsebenen mit großen Streckungsgruppen. (82e:51020)

Achtdimensionale lokalkompakte Translationsebenen mit großen kompakten

Kollineationsgruppen. (English summary) (82e:51021)

Homologies and elations in compact, connected projective planes. (82e:51022)

See also Buchanan, Thomas; et al., (82e:51019)

Löwen, Rainer Projectivities and the geometric structure of topological planes. (82m:51019)

Homogeneous compact projective planes. (82e:51023)

Equivariant embeddings of low-dimensional symmetric planes. (82j:51025)

Characterization of symmetric planes in dimension at most 4. (82j:51024)

See also Buchanan, Thomas; et al., (82e:51019)

Salzmann, Helmut Projectivities and the topology of lines. (82m:51020)

Kompakte, 8-dimensionale projektive Ebenen mit großer Kollineationsgruppe. (82j:51026)

secondary classifications:

Lorimer, J. W. Locally compact Hjelmlev planes. (82e:51014)

51H15 Topological nonlinear incidence structures

Eckhoff, Jürgen Über kombinatorisch-geometrische Eigenschaften von Komplexen und Familien konvexer Mengen. (82b:51021)

51H20 Topological geometries on manifolds [See also 57-XX.]

Löwen, Rainer Central collineations and the parallel axiom in stable planes. (82i:51025)

secondary classifications:

Gorzi, T. A. (with Gulida, L. L.) Structure of a general convex hyperspace of a Hilbert space. (Russian) (82f:58011)

Gulida, L. L. See Gorzi, T. A., (82f:58011)

Stepaňko, T. A. Forms of simplicity and semisimplicity of spaces with simple and quasisimple fundamental groups. (Russian) (82e:22022)

Invariant metric and affine connection in manifolds of pairs of images of a simplicity. (Russian) (82f:51013)

51H25 Geometries with differentiable structure [See also 53Cxx, 53C70.]

51H30 Geometries with algebraic manifold structure [See also 14-XX.]

51H99 None of the above, but in this section

secondary classifications:

Völklein, Helmut Transitivityfragen bei linearen Liegruppen. (82i:57032)

51Jxx Incidence groups

51J05 General theory

51J10 Projective incidence groups

51J15 Kinematic spaces

Guc, A. K. Isotone mappings of disconnectedly ordered Euclidean space. (Russian) 82j:51027

Tölke, Jürgen Eine kinematische Kennzeichnung der gleichseitigen Parabeln. (English summary) 82k:51014

secondary classifications:

Balzer, Wolfgang ★Empirische Geometrie und Raum-Zeit-Theorie in mengentheoretischer Darstellung. (German) [Empirical geometry and space-time theory in set-theoretic representation] (82i:03019)

51J20 Representation by near-fields and near-algebras [See also 12K05, 16A76.]

51J99 None of the above, but in this section

Buekenhout, Francis A characterization of polar spaces. 82e:51025

51Kxx Distance geometry

51K05 General theory

secondary classifications:

Bannai, Eiichi (with Bannai, Etsuko) An upper bound for the cardinality of an s -distance subset in real Euclidean space. (82k:05030)

Bannai, Etsuko See Bannai, Eiichi, (82k:05030)

51K10 Synthetic differential geometry

Penon, Jacques Infinitésimaux et intuitionisme. 82m:51021

secondary classifications:

Alexander, Ralph Planes for which the lines are the shortest paths between points. (82d:53042)

Busemann, H. (with Phadke, B. B.) Locally Desarguesian spaces. (82a:53068)

Phadke, B. B. See Busemann, H., (82a:53068)

51K99 None of the above, but in this section

Alsina, Claudi See Trillas Ruiz, Enrique, 82b:51026

Trillas Ruiz, Enrique (with Alsina, Claudi) ★Introducción a los espacios métricos generalizados. (Spanish) [Introduction to generalized metric spaces] 82h:51026

secondary classifications:

Erdős, Paul Some combinatorial problems in geometry. (82d:51002)

Gandini Zacco, Andreana Sur la molteplicità par rapport a una famiglia continua di curve. (Italian summary) (82i:52006)

51Lxx Geometric order structures [See also 53C75.]

51L05 Geometry of orders of nondifferentiable curves

Guc, A. K. On the bases of space-time geometry. (Russian) 82g:51021

Rubinstein, G. Š. (with Rutkovskii, N. V.) Axial structures and foundations of geometry. (Russian) 82f:51014

Rutkovskii, N. V. See Rubinstein, G. Š., 82f:51014

secondary classifications:

Bröcker, Ludwig Charakterisierung von reellen Kurven dritten Grades. (82g:51003)

51L10 Directly differentiable curves

Bisztriczky, Tibor (with Rival, Ivan) Continuous, slope-preserving maps of simple closed curves. 82h:51022

Rival, Ivan See Bisztriczky, Tibor, 82h:51022

51L15 n -vertex theorems via direct methods

51L20 Geometry of orders of surfaces

51L99 None of the above, but in this section

51Mxx Real and complex geometry

51M05 Euclidean geometries

Beck, Uwe Mathematisieren um eine Feldmeßaufgabe. 82e:51026

Douglas, A. J. A generalization of Apollonius' theorem. 82g:51022

Drezner, Zvi (with Wesolowsky, G. O.) The optimal sight angle problem. 82f:51015

Fox, M. D. Formulae for the curvatures of circles in chains. 82e:51024

Greenberg, Marvin Jay Euclidean and non-Euclidean geometries without continuity. 82g:51023

Hohenberg, Fritz Die Dreiecke mit $r=2p$ im komplexen Gebiet. 82m:51022

Macnab, D. S. Cyclic polygons and related questions. 82j:51029

Ponarin, Ja. P. Similarity transformations of the plane. (Russian) 82d:51009

Schmidt, Heinz-Jürgen ★Axiomatic characterization of physical geometry. 82f:51016

Smirnova, A. I. Uniform structure and Lipschitz structure in the family of lines of the Euclidean space E^n . (Russian) 82e:51027

Wesolowsky, G. O. See Drezner, Zvi, 82f:51015

secondary classifications:

Cavinato, Antonio (with Magnano, Giorgio) The principle of equivalence between lattice segments with the metric-interference effects. (Italian. English summary) (82e:82086)

Frank, Hubert (with Linsin, Iris) Hauptregelflächen einer verallgemeinerten Regelfläche mit Zentralregelfläche. (English summary) [Principal ruled surfaces of a generalized ruled surface with a central ruled surface] (82m:53005)

Gleijeses, B. Points at mutual integral distances in S^n . (82h:85007)

Linsin, Iris See Frank, Hubert, (82m:53005)

Magnano, Giorgio See Cavinato, Antonio, (82e:82086)

Markowsky, George (with Wesley, Michael A.) Fleshing out wire frames. (82f:68035)

Parker, George D. A metric model of plane Euclidean geometry. (82e:51023)

Purdy, George B. A proof of a consequence of Dirac's conjecture. (82g:05030)

Ruthotto, Johannes Kennzeichnung verallgemeinerter euklidischer Ebenen durch

Ähnlichkeitsrelationen. (English summary) (82e:51024)

Vaisman, Izu ★Foundations of three-dimensional Euclidean geometry. (82h:51002)

Wesley, Michael A. See Markowsky, George, (82f:68035)

51M10 Hyperbolic and elliptic geometries

Al-Sarraj, A. W. Geometry of the Lambert sphere. 82h:51027

Apostolova, M. P. On some theorems of rectangular axonometry of a hyperbolic space. (Bulgarian. Russian and English summaries) 82a:51012

General case of rectangular axonometry in a hyperbolic space. (Bulgarian. Russian and English summaries) 82b:51023

Benz, Walter On a functional equation arising from hyperbolic geometry. 82b:51024

Boja, N. (with Brailoiu, G.) On the self-polar simplexes and the movements of the non-Euclidean spaces. 82e:51028

Bottema, O. Two circles in the elliptic plane. 82g:51024

Brailoiu, G. See Boja, N., 82e:51028

Coxeter, Harold Scott MacDonald Angles and arcs in the hyperbolic plane. 82e:51025

Grauert, Hans (with Leykum, S.) Die pseudoeuklidische Geometrie als statistisches Gleichgewicht. 82k:51015

Jotov, Ognjan Stereographic projection in R^4 and induced orthogonal and

L_2 -transformations. (Macedonian. English summary) 82a:51013

Leykum, S. See Grauert, Hans, 82k:51015

Poénaru, V. Rappels de géométrie hyperbolique en dimension 2 et généralités sur $i: S \times S \rightarrow R...$ (See 82m:57003)

Silverman, B. W. (with Titterton, D. M.) Minimum covering ellipses. 82g:51025

Tapero, T. B. Common perpendiculars of pairs of planes in infinite-dimensional non-Euclidean spaces. (Russian) 82e:51029

Titterton, D. M. See Silverman, B. W., 82g:51025

Werner, Bernhard Zur Lösung einiger Ausgleichsprobleme im dreidimensionalen projektiv abgeschlossenen euklidischen Raum mit Hilfe benachbarter elliptischer bzw. hyperbolischer Geometrien. [On the solution of some curve-fitting problems in a three-dimensional projectively closed Euclidean space, using adjacent elliptic or hyperbolic geometries] 82m:51023

Wilker, John B. When is the inverse of an ellipse convex? 82e:51030

secondary classifications:

Drumm, Volker Ebene absolute Geometrie über euklidischen Körpern. (82e:51014)

Greenberg, Marvin Jay Euclidean and non-Euclidean geometries without continuity. (82g:51023)

Mostow, G. D. On a remarkable class of polyhedra in complex hyperbolic space. (82a:22011)

Szénassy, Barna Remarks on Gauss's work on non-Euclidean geometry. (Hungarian) (82m:01049)

Wilker, John B. Generalized symmetry. (82g:20068)

Zage, Wayne M. The geometry of binocular visual space. (82d:92037)

51M15 Geometric constructions

Abi-Khuzam, Faruk F. Inequalities of Yff type in the triangle. 82b:51025

Akin, Suat Sur la construction de quelques types de quartiques et de cubiques rationnelles et circulaires planes. (Turkish summary) 82g:51026

Ball, Derek Halving envelopes. 82e:51026

Geise, Gerhard (with Ullrich, Hans Jürgen) Geometrische Theorie der aufgelösten und unaufgelösten Mehrfachsnitte von Kossellinien für alle Kristallsysteme. 82m:51024

Golomb, Solomon W. Wreaths of tangent circles. (See 82b:00003)

Jaworek, Kurt Punktweise Linealkonstruktion der Ellipse und Hyperbel auf der Basis zweier Kreise. 82i:51026

- Krittop, B. G. Classification of cupolas taking account of ways of forming them. (Russian) **82e:51031**
 Kucerenko, S. I. (with Nikulin, N. A.) Some fourth-order curves. (Russian) **82b:51026**
 Nikulin, N. A. See Kucerenko, S. I. **82b:51026**
 Polgorny, A. L. On the analysis of first reflections of sound for curvilinear forms of halls. (Russian) **82b:51027**
 Reed, Neville Morley and more. **82i:51027**
 Ulrich, Hans Jürgen See Geise, Gerhard, **82m:51024**

secondary classifications:

- Čiřieva, V. See Konstantinov, M. S., (**82g:70004**)
 Geise, Gerhard (with Modler, Karl-Heinz) Zusammenhang zwischen ebenen, sphärischen und räumlichen Koppelgetrieben. (**82g:70003**)
 Grigor'ev, N. A. Regular simplexes inscribed into a cube and Hadamard matrices. (Russian) (**82d:10043**)
 Haruki, Hiroshi On a theorem of inversive geometry. (**82b:51020**)
 Hirayama, Akira Malfatti's problem in wasan. (Japanese) (**82g:01008**)
 Konstantinov, M. S. (with Čiřieva, V.) Determination of particular positions of four-link and five-link chains using relative transfer functions. (Russian. Bulgarian and English summaries) (**82g:70004**)
 Modler, Karl-Heinz See Geise, Gerhard, (**82g:70003**)

51M20 Polyhedra and polytopes; regular figures, division of spaces [See also 51F15.]

- Alexanderson, Gerald (with Wetzel, John E.) Arrangements of planes in space. **82i:51028**
 Bantegnic, Robert Complexes équilibrés du plan projectif. **82i:51029**
 Bernardi, Claudio (with Mosucci, Manuela) Investigating some geometrical features of 4-space. **82e:51032**
 Böhm, Johannes Typisierung und Angabe eines Baukastens für Tetraeder in Räumen konstanter Krümmung. **82a:51014**
 Bottema, O. Stewart's formula for a tetrahedron. (Dutch) **82b:51028**
 Brunner, G. O. Parameters for frameworks and space filling polyhedra. **82a:51016**
 Coxeter, Harold Scott MacDonald The edges and faces of a 4-dimensional polytope. **82i:51030**
 Galulin, R. V. Delaunay systems. **82j:51030**
 Griffiths, H. B. Triangles of triangles. **82j:51031**
 Grünbaum, Branko Two-coloring the faces of arrangements. **82b:51029**
 (with Shephard, Geoffrey C.) Patterns on the 2-sphere. **82m:51025**
 Medjanik, A. I. Tiling of E^n into space crosses. (Russian) **82j:51032**
 Mosucci, Manuela See Bernardi, Claudio, **82e:51032**
 Neumann, Maria Über einige regelmäßige prismatische Flächen mit gemeinsamen Ebenen. **82e:51033**
 Šćuric-Čudovan, Vlasta Ergänzende Untersuchungen eines Büschels der homothetischen Flächen 2. Grades und einiger Komplexe, die durch dieses Büschel bestimmt werden. (Serbo-Croatian summary) **82g:51027**
 Shephard, Geoffrey C. See Grünbaum, Branko, **82m:51025**
 Stewart, B. M. ★Adventures among the toroids. **82b:51028**
 Tzanakis, Nicholas A new proof of a theorem in trigonometry. **82b:51030**
 Walter, Marion Exploring a rectangle problem. **82i:51031**
 Wetzel, John E. See Alexanderson, Gerald, **82i:51028**
 Wunderlich, Walter Wackelige Doppelpyramiden. **82e:51034**
 Wackelikosäeder. **82e:51031**

secondary classifications:

- Baracs, Janos Juxtapositions. (French summary) (**82k:52020a**)
 See also Grünbaum, Branko; et al., (**82k:52020b**)
 Belov, N. V. See Rau, V. G.; et al., (**82g:82049**)
 Böhm, Johannes (with Hertel, Eike) ★Polyedergeometrie in n -dimensionalen Räumen konstanter Krümmung. (German) [Geometry of polyhedra in n -dimensional spaces with constant curvature] (**82k:52011b**)
 (with Hertel, Eike) ★Polyedergeometrie in n -dimensionalen Räumen konstanter Krümmung. (German) [Geometry of polyhedra in n -dimensional spaces with constant curvature] (**82k:52011a**)
 Elk, Seymour B. A nomenclature for regular tessellations and its application to polycyclic aromatic hydrocarbons. (**82j:92065**)
 Gerber, Leon The volume cut off a simplex by a half-space. (**82j:52014**)
 Goethals, J.-M. (with Seidel, J. J.) Spherical designs. (**82k:05014**)
 Goldberg, Michael On the space-filling octahedra. (**82g:52014**)
 Grünbaum, Branko (with Shephard, Geoffrey C.) Some comments on: "Juxtapositions" [Structural Topology 1979, no. 1, 59–72] by J. Baracs. (**82k:52020b**)
 Hertel, Eike Zerlegungs- und Ergänzungsgleichheit von Mengen in topologischen Räumen. (Russian and English summaries) (**82c:52008**)
 See also Böhm, Johannes, (**82k:52011a**) and (**82k:52011b**)
 Hohenberg, Fritz Geschlossene gleichseitige Polygone, deren Ecken abwechselnd einem Kreis und einer Geraden angehören. (**82b:51006**)
 Besondere gleichseitige Zwölfecke, die sich aus einem Schließungssatz ergeben. (**82c:51016**)
 Iljuhin, V. V. See Rau, V. G.; et al., (**82g:82049**)
 Lipski, Witold, Jr. (with Preparata, Franco P.) Erratum: "Finding the contour of a union of iso-oriented rectangles" [J. Algorithms 1 (1980), no. 3, 235–246; MR **82c:68062**]. (**82k:68059**)
 Liu, Andy C. F. Lattice points and Pick's theorem. (**82d:10042**)
 Preparata, Franco P. See Lipski, Witold, Jr., (**82k:68059**)
 Purdy, George B. (with Wetzel, John E.) Two-coloring inequalities for Euclidean arrangements in general position. (**82a:05043**)
 Rau, V. G. (with Iljuhin, V. V.; Belov, N. V.) Homometric solutions of the incomplete Patterson function. (Russian) (**82g:82049**)

- Rigby, J. F. Multiple intersections of diagonals of regular polygons, and related topics. (**82e:52004**)
 Seidel, J. J. See Goethals, J.-M., (**82k:05014**)
 Shephard, Geoffrey C. See Grünbaum, Branko, (**82k:52020b**)
 Végh, Ludevit Hexagonal patterns as natural forms. (**82g:92010**)
 Wetzel, John E. See Purdy, George B., (**82a:05043**)

51M25 Length, area and volume [See also 26B15.]

- Abeles, Francine Inequalities for a simplex and the number e . **82k:51017**
 Bender, William The Holditch curve tracer. **82j:51033b**
 Broman, Arne Holditch's theorem. **82j:51033a**
 Eddy, Roland H. A sequence of inequalities for certain sets of concurrent cevians. **82d:51010**
 Eves, Howard Slicing it thin. (See **82b:00003**)
 Gazdar, Abdus Sattar The area of a circle by a new method. **82i:51032**
 Nelson, R. D. Perfect quadrilaterals. **82f:51017**
 Shisha, Oved Area of a triangle and the product of its side lengths. **82i:51033**
 Vogel, Curtis R. Proof that the area of a Pythagorean triangle is never a square. **82b:51032**

secondary classifications:

- Borel, A. Commensurability classes and volumes of hyperbolic 3-manifolds. (**82j:22008**)
 Hirayama, Akira Malfatti's problem in wasan. (Japanese) (**82g:01008**)
 Klamkin, Murray S. Inequalities for inscribed and circumscribed polygons. (**82e:52008**)
 van Leeuwen, Jan (with Wood, Derick) The measure problem for rectangular ranges in d -space. (**82k:68018**)
 Wood, Derick See van Leeuwen, Jan, (**82k:68018**)
 Xeroudakes, Georgios On Pythagorean triangles. (**82h:10019**)

51M30 Line geometries and their generalizations

- Weiß, Gunter Zur euklidischen Liniengeometrie. II. **82d:51011**

secondary classifications:

- Hohenberg, Fritz Geschlossene gleichseitige Polygone, deren Ecken abwechselnd einem Kreis und einer Geraden angehören. (**82b:51006**)
 Keller, O.-H. Die Homologiegruppen der Mannigfaltigkeit, die aus den k -Räumen auf einer nicht ausgeartet $2k$ -Quadratik besteht. (**82f:14052**)
 Šćuric-Čudovan, Vlasta Ergänzende Untersuchungen eines Büschels der homothetischen Flächen 2. Grades und einiger Komplexe, die durch dieses Büschel bestimmt werden. (Serbo-Croatian summary) (**82g:51027**)

51M35 Synthetic treatment of fundamental manifolds in projective geometries (Grassmannians, Veronesians and their generalizations) [See also 14M15.]

51M99 None of the above, but in this section

- Crapo, Henry Structural rigidity. (French summary) **82g:51028**
 Gabrićidze, A. A. On symmetric sets. (Russian. Georgian and English summaries) **82e:51035**
 Osetek, Jerzy On the order of $n+3$ hyperplanes in n -dimensional projective geometry. **82j:51034**

secondary classifications:

- Grünbaum, Branko (with Shephard, Geoffrey C.) Satins and twills: an introduction to the geometry of fabrics. (**82k:52017**)
 Kopp, V. G. Geometry of a neutral space. I. (Russian) (**82k:53039a**)
 Geometry of a neutral space. II. (Russian) (**82k:53039b**)
 Rosenberg, Ivo Structural rigidity. I. Foundations and rigidity criteria. (**82e:05012**)
 Shephard, Geoffrey C. See Grünbaum, Branko, (**82k:52017**)
 Tihomirov, A. S. Constructive realization of a mapping of K -planes of the projective space P_n by a hypersurface of the projective space P_{n+1} . (Russian) (**82i:14031**)
 Trofimov, A. A. ★Основы горной геометрии (геометрия недр). (Russian) [Foundations of mining geometry (geometry of mineral resources)] (**82g:86019**)
 (Zamorzaev, A. M.) See All-Union Symposium: Theory of Symmetry and its Generalizations, (**82g:51020**)
 All-Union Symposium:
 Theory of Symmetry and its Generalizations ★Всероссийский Симпозиум по Теории Симметрии и ее Обобщениям. (Russian) [All-Union Symposium on the Theory of Symmetry and its Generalizations] (**82g:51020**)
 Theory of symmetry ★Всероссийский Симпозиум по Теории Симметрии и ее Обобщениям. (Russian) [All-Union Symposium on the Theory of Symmetry and its Generalizations] (**82g:51020**)

51Nxx Analytic and descriptive geometry

51N05 Descriptive geometry

- Bankoff, Leon How did Pappus do it? (See **82b:00003**)
 Černjavskii, A. G. The relation of geometry and stability of discrete systems. (Russian) **82g:51029**
 Eftimescu, Cornelia See Rusu, I.; et al., **82g:51030**
 Hohenberg, Fritz Gleichseitige Polygone, deren Ecken abwechselnd auf zwei Geraden liegen. **82a:51015**
 Geschlossene gleichseitige Polygone, deren Ecken abwechselnd gegebenen Kreisen

oder Geraden angehören. **82k:51018**

Jank, Walther Zur Kinematik des Kniegelenks. **82j:51035**

Karadimitrov, D. Conic axoids (trajectories). (Bulgarian. Russian and German summaries) **82b:51029**

(Koczyk, H.) See Lewandowski, Zbigniew. **82m:51026**

(Kowalewski, Adam) See Lewandowski, Zbigniew. **82m:51026**

Lewandowski, Zbigniew ★Geometria wykreslna. (Polish) [Descriptive geometry] **82m:51026**

Marica, Carmen See Rusu, I.; et al., **82g:51030**

Otto, Edward See Otto, Franciszek. **82k:51019**

Otto, Franciszek (with Otto, Edward) ★Podręcznik geometrii wykreslnej. (Polish) [Textbook of descriptive geometry] **82k:51019**

Pritulenko, P. V. ★Построение плоских фигур и сечений по специальным заданиям. (Russian) [Construction of plane figures and sections given specific conditions] **82f:51018a**

★Plane figures and sections: how to construct them given specific conditions. **82f:51018b**

Rabl, Karl Über die Koinzidenzgebilde von linearen Zweibilderverfahren für den n -dimensionalen Raum. II. **82a:51016**

Rixecker, Helmut (with Rösler, Günther) ★Darstellende Geometrie. (German) [Descriptive geometry] **82k:51020**

Rösler, Günther See Rixecker, Helmut. **82k:51020**

Rusu, I. (with Marica, Carmen; Vasilache, Mariana; Eftimescu, Cornelia)

Representation of the shadows in the plane axial reference system. (Romanian. French summary) **82g:51030**

(Šokurov, Vladimir) See Pritulenko, P. V., **82f:51018b**

Vasilache, Mariana See Rusu, I.; et al., **82g:51030**

Živkova, Z. T. Construction of proper shadows of surfaces of revolution under an arbitrary parallel lighting. (Bulgarian. Russian and French summaries) **82f:51019a**

A method for finding the proper shadows of some nonrotational surfaces under an arbitrary parallel lighting. (Bulgarian. Russian and French summaries) **82f:51019b**

secondary classifications:

Ball, Derek Halving envelopes. **(82c:51026)**

(Barner, Martin) See Graf, Ulrich. **(82c:51003)**

B'čarov, S. (with Paraskov, C.; Pandov, V.) Sufficiency of the moment condition for an equilibrium of an arbitrary system of forces. (Bulgarian. Russian and English summaries) **(82b:70001)**

Bekjarov, B. (with Hristov, V.) Zones of reach and operation of plane manipulators. (Bulgarian. Russian and English summaries) **(82c:70002)**

Frolow, Igor Infinitesimal contact transformations and their applications to abstract growth patterns. **(82j:92004)**

Graf, Ulrich ★Darstellende Geometrie. (German) [Descriptive geometry] **(82c:51003)**

Hristov, V. See Bekjarov, B., **(82c:70002)**

Karger, Adolf Similarity motions in E_3 with plane trajectories. (Czech summary) **(82b:53016)**

Križanovskii, V. V. A method for solving an inverse problem on the position of a manipulator. (Russian) **(82g:68019b)**

(Krot, V. M.) See Problems on the theory of robots and artificial intelligence, **(82g:68091a)**

Pandov, V. See B'čarov, S.; et al., **(82b:70001)**

Paraskov, C. See B'čarov, S.; et al., **(82b:70001)**

Paukowsch, Hans Peter Die Schmiegekegelschnitte einer Klothoide. **(82a:53005)**

(Rybak, V. I.) See Problems on the theory of robots and artificial intelligence, **(82g:68091a)**

Stewart, B. M. ★Adventures among the toroids. **(82b:51028)**

Wunderlich, Walter Zur projektiven Invarianz von Wackelstrukturen. (English and Russian summaries) **(82b:53017)**

Artificial intelligence ★Вопросы теории роботов и искусственного интеллекта. (Russian) [Problems on the theory of robots and artificial intelligence] **(82g:68091a)**

Problems on the theory of robots and artificial intelligence ★Вопросы теории роботов и искусственного интеллекта. (Russian) [Problems on the theory of robots and artificial intelligence] **(82g:68091a)**

51N10 Affine analytic geometry

Cammaroto, Filippo On a model of non-Euclidean geometry. (Italian. English summary) **82h:51033**

Gerber, Leon Napoleon's theorem and the parallelogram inequality for affine-regular polygons. **82h:51030**

Jusupov, D. Š. Density of a set of parabolas in equicentroaffine geometry. (Russian) **82f:51020**

Su, Bu Qing On affine invariants of a Bezier curve. (Chinese. English summary) **82g:51031**

secondary classifications:

Bolker, Ethan D. (with Roth, B.) When is a bipartite graph a rigid framework? **(82c:57003)**

Cruceanu, V. Sur les espaces G -affines. **(82m:54041)**

Di Benedetto, Mario (with Speciale, Angela) Measurable two-parameter families of curves in the affine plane. (Italian. French summary) **(82j:53114)**

Karger, Adolf Equiaffine Darboux motions with double roots. **(82c:51028)**

Maniscalco, Ignazia (with Portolano, Aida) Three-parameter measurable families of manifolds of the affine plane. (Italian) **(82j:53118)**

Portolano, Aida See Maniscalco, Ignazia, **(82j:53118)**

Roth, B. See Bolker, Ethan D., **(82c:57003)**

Speciale, Angela See Di Benedetto, Mario, **(82j:53114)**

51N15 Projective analytic geometry

Hohenberg, Fritz Bestimmung eines Dreiecks durch symmetrische Funktionen. **82m:51027**

Hrušev, V. G. A model of a geometric construction. (Russian) **82c:51036**

Penrose, Roger (with Smith, Cedric A. B.) A quadratic mapping with invariant cubic curve. **82c:51027**

Smith, Cedric A. B. See Penrose, Roger, **82c:51027**

Witczyński, Krzysztof Projective collineations as products of cyclic collineations. **82a:51017**

secondary classifications:

Bohdanowicz-Grochowska, J. (with Bottema, O.; Grochowaki, B.) Many-fold points of the oblique projection of a curve of order n . **(82c:51003)**

Bottema, O. See Bohdanowicz-Grochowska, J.; et al., **(82c:51003)**

Grochowaki, B. See Bohdanowicz-Grochowska, J.; et al., **(82c:51003)**

Hudenko, V. N. On the geometry of manifolds of multidimensional quadrics. (Russian) **(82i:53009)**

Kulkarni, Mangala Fundamental theorem of projective geometry over a commutative ring. **(82m:51001)**

Stoka, Marius I. Problems of integral geometry in the projective plane P_3 . (Italian) **(82j:53120)**

Zund, Joseph The projective geometry of the Weyl spinor. **(82h:53035)**

51N20 Euclidean analytic geometry

Devide, Vladimir Über eine Klasse von Dreiecken. (Serbo-Croatian summary) **82a:51018**

Donis, A. A. See Podkorytov, A. N., **82a:51019**

Gontčarjuk, I. V. (with Tarasenko, M. I.) Normal equation of a parabola. (Russian) **82m:51028**

Kaytancıoğlu, Hilmi Abbildung des Raumes mittels eines Kugelkomplexes. (Turkish summary) **82j:51028**

Palman, Dominik Plücker'sches Konoid und Steinersche Fläche als Flächen des einfach isotropen Raums. (Serbo-Croatian summary) **82h:51034**

Patuwo, B. E. (with Thomas, R. S. D.; Wang, Chung Lie) The triangle inequality of Lessells and Pelling. (Serbo-Croatian summary) **82c:51034**

Podkorytov, A. N. (with Donis, A. A.) Construction of normals at nodes of discretely given plane curves. (Russian) **82a:51019**

Tarasenko, M. I. See Gontčarjuk, I. V., **82m:51028**

Thomas, R. S. D. See Patuwo, B. E.; et al., **82i:51034**

Wang, Chung Lie See Patuwo, B. E.; et al., **82i:51034**

Wunderlich, Walter Neue Wackelkosaeder. **82d:51012**

secondary classifications:

Kovalev, M. D. A characteristic property of a disc. (Russian) **(82j:52007)**

Sachs, Hans Algebraische und analytische Methoden in der Theorie der Geradenkomplexe des Flaggenraumes. **(82j:53025)**

Shi, Xian Liang Approximation of plane curves by equidistant Archimedean spirals. (Chinese) **(82i:41022)**

51N25 Analytic geometry with other transformation groups

Karger, Adolf Equiaffine Darboux motions with double roots. **82c:51028**

Sarymsakov, A. T. The trajectories of some quadratic transformations of a two-dimensional simplex. (Russian) **82j:51036**

Schwerdtfeger, Hans ★Geometry of complex numbers. **82g:51032**

Tölke, Jürgen Eine Bemerkung zum gleichseitigen hyperbolischen Paraboloid als Bewegungsfläche bei Zylinderschrotungen. **82a:51020**

secondary classifications:

Kuznetsova, T. A. Bisectioctave and disemioctave planes. (Russian) **(82a:51011)**

51N30 Geometry of classical groups [See also 20Gxx, 14Lxx.]

Quaisser, Erhard Zum Aufbau affiner Ebenen aus dem Spiegelungsbegriff. **82k:51021**

secondary classifications:

Ignatenko, V. F. Algebraic surfaces with the symmetry group of the polyhedron 3_{21} . (Russian) **(82i:14022)**

Ponarin, Ja. P. Similarity transformations of the plane. (Russian) **(82d:51009)**

Schmidt, Heinz-Jürgen ★Axiomatic characterization of physical geometry. **(82f:51016)**

51N35 Questions of classical algebraic geometry [See also 14Nxx.]

Hohenberg, Fritz Der Brocardsche Winkel im komplexen Gebiet. (Serbo-Croatian summary) **82i:51035**

Nadolimnyĭ, V. A. Investigation of a reduced equation of a surface. (Russian) **82h:51031**

secondary classifications:

Vujaković, Dušan Ruled surfaces whose generators are rays of a congruence of third order and first class, and whose directrix is a conic section. (Russian. Serbo-Croatian summary) **(82c:14046)**

51N99 None of the above, but in this section

Grzegorzczak, W. M. (with Kucharczyk, Piotr) Klein geometry: equivariance relation and quotient geometries. **82d:51013**

Kucharczyk, Piotr See Grzegorzczak, W. M., 82d:51013

secondary classifications:

Chirlița, G. A. (with Jiménez, P. R. M.) Application of "projective geometry" to Guggenheim's method of calculating the constants of speed of reaction. (Spanish. English summary) (82c:80020)

(Gerber, H. Joseph) See Liming, Roy Aaron, (82g:68095)

Jiménez, P. R. M. See Chirlița, G. A., (82c:80020)

Liming, Roy Aaron ★Mathematics for computer graphics. (82g:68095)

Sieber, Helmut Die Berechnung von π nach Legendre—ein Verfahren für

Taschenrechner mit Verallgemeinerungen. (82c:51005)

(Singer, Josef) See Liming, Roy Aaron, (82g:68095)

52-XX CONVEX SETS AND RELATED GEOMETRIC TOPICS

52-01 Elementary exposition, textbooks

Böhm, Johannes (with Hertel, Eike) ★Polyedergeometrie in n -dimensionalen Räumen konstanter Krümmung. (German) [Geometry of polyhedra in n -dimensional spaces with constant curvature] 82k:52001b

(with Hertel, Eike) ★Polyedergeometrie in n -dimensionalen Räumen konstanter Krümmung. (German) [Geometry of polyhedra in n -dimensional spaces with constant curvature] 82k:52001a

Hertel, Eike See Böhm, Johannes, 82k:52001

52-02 Advanced exposition (research surveys, monographs, etc.)

Gruber, Peter M. (with Schneider, Rolf) Problems in geometric convexity. 82d:52001

Schneider, Rolf See Gruber, Peter M., 82d:52001

52-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

MacGillivray, Caroline H. The polyhedron in A. Dürer's "Melencolia I". An over 450 years old puzzle solved? (82m:01029)

Rubin, Michael Architecture and geometry. (French summary) (82c:01005)

52-04 Explicit machine computation and programs (not the theory of computation or programming)

Bowyer, Adrian Computing Dirichlet tessellations. 82f:52001

Chvátal, Václav (with Klineček, G. T.) Finding largest convex subsets. 82i:52001

Dobkin, David P. (with Snyder, Lawrence) On a general method for maximizing and minimizing among certain geometric problems (extended abstract). 82b:52001

Fesenko, A. G. Binary lattice packing of congruent polygonal objects. (Russian. English summary) 82k:52002

Gendzwil, D. J. (with Stauffer, M. R.) Analysis of triaxial ellipsoids: their shapes, plane sections, and plane projections. 82g:52001

Hariton, L. R. See Kotljars, V. D.; et al., 82b:52002

von Hohenbalken, B. Finding simplicial subdivisions of polytopes. 82h:52001

Huang, Wen Qi (with Zhan, Shu Hao) A quasiphysical method of solving packing problems. 82h:52002

Jaromczyk, Jerzy W. Linear decision trees are too weak for convex hull problem. 82j:52001

Klineček, G. T. See Chvátal, Václav, 82i:52001

Kotljars, V. D. (with Nosenko, V. I.; Hariton, L. R.) Conditions for existence of and algorithms for certain stackings of parallelepipeds. (Russian) 82b:52002

Nosenko, V. I. See Kotljars, V. D.; et al., 82b:52002

Snyder, Lawrence See Dobkin, David P., 82b:52001

Stauffer, M. R. See Gendzwil, D. J., 82g:52001

Thomas, D. J. A useful algorithm in lattice geometry. 82j:52002

Watson, D. F. Computing the n -dimensional Delaunay tessellation with application to Voronoi polytopes. 82f:52002

Zhan, Shu Hao See Huang, Wen Qi, 82h:52002

secondary classifications:

Aiello, A. (with Burattini, E.; Massarotti, A.; Ventriglia, F.) "A posteriori" evaluation of bin packing approximation algorithms. (82h:68061)

Avis, David (with Toussaint, G. T.) An efficient algorithm for decomposing a polygon into star-shaped polygons. (82m:68130)

Bentley, Jon Louis (with Weide, Bruce W.; Yao, Andrew Chi Chih) Optimal expected-time algorithms for closest point problems. (82g:68084)

Burattini, E. See Aiello, A.; et al., (82h:68061)

(Bykat, A.) See Overmars, Mark H.; et al., (82a:68080)

Devroye, Luc A note on finding convex hulls via maximal vectors. (82a:68070)

On the average complexity of some bucketing algorithms. (82h:68063)

(with Toussaint, G. T.) A note on linear expected time algorithms for finding convex hulls. (German summary) (82i:52008)

Fowler, Robert J. (with Paterson, Michael S.; Tanimoto, Steven L.) Optimal packing and covering in the plane are NP-complete. (82c:05112)

Frederickson, Greg N. Probabilistic analysis for simple one- and two-dimensional bin packing algorithms. (82i:68019)

Geiser, James R. See Gray, Norman H.; et al., (82c:86007)

Geiser, Peter A. See Gray, Norman H.; et al., (82c:86007)

Golan, Igal Performance bounds for orthogonal oriented two-dimensional packing algorithms. (82m:68066)

Gray, Norman H. (with Geiser, Peter A.; Geiser, James R.) On the least-squares fit of small and great circles to spherically projected orientation data. (82c:86007)

Lee, Der Tsai See Smith, J. MacGregor; et al., (82g:68050)

van Leeuwen, Jan (with Wood, Derick) The measure problem for rectangular ranges in d -space. (82k:68018)

See also Overmars, Mark H., (82a:68080)

Liebman, Judith S. See Smith, J. MacGregor; et al., (82g:68050)

Lipski, Witold, Jr. (with Preparata, Franco P.) Efficient algorithms for finding maximum matchings in convex bipartite graphs and related problems. (82m:68069)

Massarotti, A. See Aiello, A.; et al., (82h:68061)

Overmars, Mark H. (with van Leeuwen, Jan) Further comments on A. Bykat's convex hull algorithm: "Convex hull of a finite set of points in two dimensions" [Inform. Process. Lett. 7 (1978), no. 6, 296-298; MR 80b:68041]. (82a:68080)

Dynamization of order decomposable set problems. (82i:68045)

Paterson, Michael S. See Fowler, Robert J.; et al., (82c:05112)

Preparata, Franco P. See Lipski, Witold, Jr., (82m:68069)

Shearer, James B. A counterexample to a bin packing conjecture. (82m:68072)

Smith, J. MacGregor (with Lee, Der Tsai; Liebman, Judith S.) An $O(n \log n)$ heuristic for Steiner minimal tree problems on the Euclidean metric. (82g:68050)

Tanimoto, Steven L. See Fowler, Robert J.; et al., (82c:05112)

Toussaint, G. T. See Devroye, Luc, (82i:52008) and Avis, David, (82m:68130)

Ventriglia, F. See Aiello, A.; et al., (82h:68061)

Weide, Bruce W. See Bentley, Jon Louis; et al., (82g:68084)

Wood, Derick See van Leeuwen, Jan, (82k:68018)

Yao, Andrew Chi Chih See Bentley, Jon Louis; et al., (82g:68084)

52-06 Proceedings, conferences, etc.

Gratz ★12. Steiermärkisches Mathematisches Symposium. (German) [Twelfth Styrian Mathematical Symposium] 82f:52003

Symposium:

Styrian Mathematical ★12. Steiermärkisches Mathematisches Symposium. (German) [Twelfth Styrian Mathematical Symposium] 82f:52003

52A01 Axiomatic and generalized convexity

Bair, Jacques Some characterizations of the asymptotic cone and the lineality space of a convex set. (German and French summaries) 82k:52003

Day, B. J. Correction to: "Locale geometry" [Pacific J. Math. 83 (1979), no. 2, 333-339; MR 81k:52002]. 82g:52002

Degreel, Eric Pasting and folding convexity spaces. 82b:52003

De Smet, H. J. P. Algebraic convexity. (Dutch) 82j:52003

Diminnie, Charles R. (with White, Albert G.) Remarks on strict convexity and betweenness postulates. 82k:52004

Flood, Joe Semiconvex geometry. 82k:52005

Gudder, Stanley P. A general theory of convexity. (Italian summary) 82j:52004

Jamison-Waldner, Robert E. Copoints in antimatroids. 82k:52006

The space of maximal convex sets. 82h:52003

Kay, David C. The Prenowitz join system for affine structures. 82d:52002

Komiyama, Hidetoshi Convexity on a topological space. 82i:52002

van Mill, Jan (with van de Vel, Marcel) Subbases, convex sets, and hyperspaces. 82k:52007

Serbskii, E. V. Description of H -convex sets in a certain case. (Russian) 82g:52003

Sierksma, Gerard Convexity on unions of sets. 82b:52004

Soltan, V. P. Helly numbers and Carathéodory numbers in the axiomatic theory of convexity. (Russian) 82c:52001

Convex hulls that preserve diameters of sets. (Russian. English summary)

82h:52005

Metric extremal and boundary points. (Russian) 82i:52003

van de Vel, Marcel See van Mill, Jan, 82k:52007

White, Albert G. See Diminnie, Charles R., 82k:52004

Zefins'kii, Ju. B. Various generalizations of the concept of convexity. (Russian)

82m:52002

Zimmermann, Karel Convexity in semimodules. (Czech summary) 82k:52008

secondary classifications:

Asimow, L. (with Ellis, A. J.) ★Convexity theory and its applications in functional analysis. (82m:46009)

Buhiescu, T. T. On convex functions from a fuzz X to a fuzz Y . (82g:03090)

Ellis, A. J. See Asimow, L., (82m:46009)

German, L. F. (with Soltan, V. P.) Quasiconvexity in linear and metric spaces. (Russian) (82m:46003)

Gruber, Peter M. Isometrien des Konvexringes. (82i:52011)

Horowitz, D. A. (with Rose, D. A.; Saff, E. B.) A comment on the convexity condition. (82d:52003)

Hu, Thakyn (with Kirk, W. A.) On local isometries and isometries in metric spaces. (82k:54071)

Kirk, W. A. See Hu, Thakyn, (82k:54071)

Las Vergnas, Michel Convexity in oriented matroids. (82f:05027)

Netrebin, A. G. Separability of convex sets and the concept of convexity on the surface of a convex body. (Russian) (82f:52007)

Orchinnikov, S. V. Convexity in subsets of lattices. (82j:06013)

Rose, D. A. See Horowitz, D. A.; et al., (82d:52003)

Saff, E. B. See Horowitz, D. A.; et al., (82d:52003)

Soltan, V. P. An axiomatic approach to the theory of convex functions. (Russian) (82a:26008)

See also German, L. F., (82m:46003)

52A05 Convex sets without dimension restrictions

- Brøndsted, A. (with Coquet, G.; Dupin, J.-C.) Translates d'ensembles convexes et propriété d'intersection. (English summary) **82a:52001c**
- Coquet, G. (with Dupin, J.-C.) Sur l'intersection des translates d'ensembles convexes. (English summary) **82a:52001a**
- (with Dupin, J.-C.; Jongmans, F.) Addenda: "Sur l'intersection des translates d'ensembles convexes" by Coquet and Dupin. (English summary) **82a:52001b**
- See also Brøndsted, A.; et al., **82a:52001c**
- Dragomirescu, Mihai Fenchel-duality without convexity. (See **82e:90005**)
- Dupin, J.-C. See Coquet, G., **82a:52001** and Brøndsted, A.; et al., **82a:52001c**
- Jongmans, F. De l'art d'être à bonne distance des ensembles dont la décomposition atteint un stade avancé. (English summary) **82e:52001**
- See also Coquet, G.; et al., **82a:52001b**

secondary classifications:

- Degani Cattelani, F. The spectrum of simple and ordinate nonconvexity for the Ljapunov set in infinite dimension. (Italian) (**82b:26014**)
- Delgado, J. A. Blaschke's theorem for convex hypersurfaces. (**82e:53078**)
- Dragomirescu, Mihai H -duality. (See **82e:90005**)
- Haydon, R. (with Odell, E.; Sternfeld, Y.) A fixed point theorem for a class of star-shaped sets in C_0 . (**82c:47070**)
- Odell, E. See Haydon, R.; et al., (**82c:47070**)
- Spruill, Carl Some exact iterative procedures for finding the puncture point of a convex set. (**82b:90092**)
- Sternfeld, Y. See Haydon, R.; et al., (**82c:47070**)

52A07 Convex sets in topological vector spaces [See also 46A55.]

- Clausing, Achim Retractions and open mappings between convex sets. **82b:52006**
- Floret, Klaus On the sum of two closed convex sets. **82b:52007**
- Komiyama, Hidetoshi Closedness of cones. **82i:52004**
- Narang, T. D. Generalisations of different types of convexities to metric spaces. **82i:52005**
- Sperner, Emanuel, Jr. Zur expliziten Bestimmung der Norm der selbstadjungierten Minkowski-Räume. **82f:52004**
- Vangeldere, Joseph Séparation et propriété d'intersection relative. (English summary) **82b:52008**
- Zadernan, V. G. Bounds and quasi-interior points of complex sets in a locally convex space. (Russian) **82j:52005**

secondary classifications:

- Andersen, Tage Bai Relative width and extension constants for compact convex sets. (**82c:46011**)
- Asimow, L. (with Ellis, A. J.) ★Convexity theory and its applications in functional analysis. (**82m:46009**)
- Diminnie, Charles R. (with White, Albert G.) Remarks on strict convexity and betweenness postulates. (**82k:52004**)
- Effros, Edward G. (with Shen, Chao Liang) The geometry of finite rank dimension groups. (**82c:46077**)
- Ellis, A. J. See Asimow, L., (**82m:46009**)
- Gorzi, T. A. (with Gulida, L. L.) Structure of a general convex hyperspace of a Hilbert space. (Russian) (**82f:58011**)
- Gulida, L. L. See Gorzi, T. A., (**82f:58011**)
- Hess, H.-U. Infinite-dimensional convex sets with a property common to finite-dimensional convex sets. (**82c:46012**)
- Isac, George ★Cônes localement bornés et cônes complètement réguliers. (French) [Locally bounded cones and completely regular cones] (**82j:47069**)
- Kalton, N. J. (with Peck, N. Tenney) A re-examination of the Roberts example of a compact convex set without extreme points. (**82b:46055**)
- Khurana, Surjit Singh Pointwise compactness on extreme points. (**82k:46018**)
- Lima, Ásvald On extreme operators on finite-dimensional Banach spaces whose unit balls are polytopes. (**82j:47061**)
- Maluta, Elisabetta Characterization of normal type structure by means of sequences. (Italian summary) (**82i:46027**)
- Peck, N. Tenney See Kalton, N. J., (**82b:46055**)
- Pelczyński, Aleksander Geometry of finite-dimensional Banach spaces and operator ideals. (**82j:46020**)
- Plant, Andrew T. A note on the modulus of convexity. (**82b:46030**)
- Saab, Elias Extreme points, separability, and weak K -analyticity in dual Banach spaces. (**82c:46020**)
- Schäffer, Juan Jorge Natural metrics on faceless cones. (**82k:46015**)
- Shen, Chao Liang See Effros, Edward G., (**82c:46077**)
- Szarek, Stanisław (with Tomczak-Jaegermann, Nicole) On nearly Euclidean decomposition for some classes of Banach spaces. (**82c:46032**)
- Tokarev, E. V. On c -convex Banach lattices. (Russian) (**82k:46037**)
- Tomczak-Jaegermann, Nicole See Szarek, Stanisław, (**82c:46032**)
- White, Albert G. See Diminnie, Charles R., (**82k:52004**)
- Wriedt, Michael Charakterisierungen lokal uniform konvexer Mengen. (**82k:46029**)

52A10 Convex sets in 2 dimensions

- Breen, Marilyn An m -convexity property for complementary pairs in the plane. **82b:52009**
- A quantitative version of Krasnosel'skii's theorem in \mathbb{R}^2 . **82j:52006**
- Croft, H. T. Convex curves in which a triangle can revolve. **82c:52003**
- (with Falconer, K. J.) Lines cutting convex sets in the plane. **82f:52005**
- Falconer, K. J. See Croft, H. T., **82f:52005**
- Florian, A. Über die Durchlässigkeit gewisser Scheibenschichten. **82c:52004**
- Gandini Zucco, Andreana Sur la multiplicité par rapport à une famille continue de courbes. (Italian summary) **82i:52006**

Horowitz, D. A. (with Rose, D. A.; Saff, E. B.) A comment on the convexity condition. **82d:52003**

- Kovalev, M. D. A characteristic property of a disc. (Russian) **82j:52007**
- Larman, D. G. (with Tamvakis, N. K.) A characterization of centrally symmetric convex bodies in E^n . **82j:52008**
- Rogers, C. Ambrose An equichordal problem. **82j:52009**
- Rose, D. A. See Horowitz, D. A.; et al., **82d:52003**
- Saburi, Nobuo Ratio between measures of two polygons. **82c:52005**
- Saff, E. B. See Horowitz, D. A.; et al., **82d:52003**
- Tamvakis, N. K. See Larman, D. G., **82j:52008**
- Troesch, B. A. Optimization of nested polygons. **82g:52004**
- Zamfirescu, Tudor Most convex mirrors are magic. **82k:52009**

secondary classifications:

- Chaiken, Seth (with Kleitman, Daniel J.; Saks, Michael E.; Shearer, James B.) Covering regions by rectangles. (**82m:52007**)
- Goodman, Jacob E. On the largest convex polygon contained in a nonconvex n -gon, or how to peel a potato. (**82g:52011**)
- Ho, Chung Wu Deforming star-shaped polygons in the plane. (**82e:52005**)
- Kleitman, Daniel J. See Chaiken, Seth; et al., (**82m:52007**)
- Lewis, Ted Two counterexamples concerning transversals for convex subsets of the plane. (**82e:52006**)
- Peschel, M. Präferenz, Referenz, Konvexität und Effizienz—Grundbegriffe für Entscheidungsprozesse mit mehrfacher Zielsetzung. (**82a:90015**)
- Saks, Michael E. See Chaiken, Seth; et al., (**82m:52007**)
- Scott, Paul R. Sets of constant width and inequalities. (**82k:52013**)
- Shearer, James B. See Chaiken, Seth; et al., (**82m:52007**)

52A15 Convex sets in 3 dimensions

- Gallivan, S. (with Larman, D. G.) Further results on increasing paths in the one-skeleton of a convex body. **82i:52007**
- (with Gardner, R. J.) A counterexample to a "simplex algorithm" for convex bodies. **82m:52001**
- Gardner, R. J. See Gallivan, S., **82m:52001**
- Goethals, J.-M. (with Seidel, J. J.) The football. **82j:52010**
- Gurin, A. M. An analogue of the Cauchy theorem. (Russian) **82k:52010**
- Larman, D. G. See Gallivan, S., **82i:52007**
- Seidel, J. J. See Goethals, J.-M., **82j:52010**

secondary classifications:

- Galiulin, R. V. Delaunay systems. (**82j:51030**)
- Mighell, A. D. See Santoro, A.; et al., (**82b:52018**)
- Nádeník, Zbyněk Eine geometrische Anwendung eines Seitenstückes zur Ungleichung von Wirtinger. (Czech summary) (**82k:52019**)
- Rodgers, J. R. See Santoro, A.; et al., (**82b:52018**)
- Santoro, A. (with Mighell, A. D.; Rodgers, J. R.) The determination of the relationship between derivative lattices. (**82b:52018**)

52A20 Convex sets in n dimensions

- Arutjunov, A. V. Convexity properties of the Legendre transformation. (Russian) **82b:52010**
- Bair, Jacques (with Vangeldere, Joseph) Équivalences concernant la séparation de plusieurs cônes convexes. **82a:52002**
- Brown, A. L. Chebyshev sets and facial systems of convex sets in finite-dimensional spaces. **82f:52006**
- Devroye, Luc (with Toussaint, G. T.) A note on linear expected time algorithms for finding convex hulls. (German summary) **82i:52008**
- Dorn, Carl Spherical and ellipsoidal theorems for convex bodies. **82k:52011**
- Dziechcińska-Halamoda, Zyta Conditions for the translation of convex sets into convex sets. (Polish. German summary) **82g:52005**
- Characterization of the set of centers of a convex body by support cones. (Polish. English summary) **82i:52009**
- Eckhardt, Ulrich Representation of convex sets. **82a:52003**
- Falconer, K. J. Singularities of sets of constant width. **82j:52011**
- Fedorov, V. P. Extremal problems in Pogorelov's cone. (Russian) **82g:52006**
- Goodey, P. R. Limits of intermediate surface area measures of convex bodies. **82i:52010**
- Gruber, Peter M. Isometrien des Konvexkörpers. **82i:52011**
- Grygarová, Libuše Über Punktberührung von konvexen Mengen. (Czech summary) **82k:52012a**
- Asymptotische Berührung k -ter Ordnung konvexer Mengen. (Czech summary) **82k:52012b**
- Zur asymptotischen Berührung von konvexen Mengen. (Czech summary) **82k:52012c**
- Harazisvili, A. B. Some properties of the center of symmetry. (Russian. Georgian and English summaries) **82g:52007**
- Hensley, Douglas Concavity of powers of a convolution. **82m:52002**
- Klee, Victor Another generalization of Carathéodory's theorem. **82i:52012**
- Krautwald, Walter Kennzeichnungen der affinen Bilder von Körpern konstanter Breite. (English summary) **82j:52012**
- Linhart, J. Die Beleuchtung von Kugeln. **82i:52013**
- Loewy, R. Extreme points of a convex subset of the cone of positive semidefinite matrices. **82b:52011**
- Netrebin, A. G. Separability of convex sets and the concept of convexity on the surface of a convex body. (Russian) **82f:52007**
- Šaidenko, A. V. Mappings that preserve the value of set functions. (Russian) **82d:52004**
- Schneider, Rolf (with Wieacker, John André) Approximation of convex bodies by polytopes. **82g:52008**

Zur optimalen Approximation konvexer Hyperflächen durch Polyeder. 82m:52003

- Scott, Paul R. Sets of constant width and inequalities. 82c:52013
 Toussaint, G. T. See Devroye, Luc, 82i:52008
 Vangheluwe, Joseph See Blair, Jacques, 82a:52002
 Vial, Jean-Philippe Strong convexity of sets and functions. 82m:52004
 Wiesacker, John André See Schneider, Rolf, 82g:52008

secondary classifications:

- Bakiev, K. See Skubenko, B. F., (82b:10039)
 Beloševskii, M. I. An integral variant of the Brunn-Minkowski inequality. (Russian) (82c:52007)
 Breckner, Wolfgang W. (with Orbán, Gheorghe) On the continuity of s -convex mappings. (See 82c:90005)
 Brehm, Ulrich (with Kühnel, Wolfgang) Smooth approximation of polyhedral surfaces with respect to curvature measures. (See 82c:53001)
 Burton, G. R. (with Larman, D. G.) An inequality for skeleta of convex bodies. (82i:52011)
 (Connelly, Robert) See Kuiper, Nicolaas H., (82a:53060)
 Deumlich, R. (with Elster, K.-H.) On the theory of conjugate functions. (82c:90084)
 Devroye, Luc A note on finding convex hulls via maximal vectors. (82a:68070)
 Elster, K.-H. See Deumlich, R., (82c:90084)
 Frumkin, M. A. The number of natural solutions of a system of linear Diophantine equations. (Russian) (82d:10027)
 Gallivan, S. (with Larman, D. G.) Further results on increasing paths in the one-skeleton of a convex body. (82i:52007)
 Huang, H. C. (with Trotter, L. E., Jr.) A technique for determining blocking and anti-blocking polyhedral descriptions. (82g:90066)
 Katchalski, Meir Thin sets and common transversals. (82a:52005)
 Kokarev, V. N. Estimation of the principal radii of curvature of a closed convex hypersurface in E^{n+1} from the second elementary symmetric function of its conditional radii of curvature. (Russian) (82g:53067)
 Kühnel, Wolfgang See Brehm, Ulrich, (See 82i:53001)
 Kuiper, Nicolaas H. Sphères polyédriques flexibles dans E^3 , d'après Robert Connelly. (82a:53060)
 Larman, D. G. See Burton, G. R., (82i:52011) and Gallivan, S., (82i:52007)
 Orbán, Gheorghe See Breckner, Wolfgang W., (See 82c:90005)
 Rohu, Jiri An existence theorem for systems of nonlinear equations. (82f:26016)
 Schenzel, Peter On the number of faces of simplicial complexes and the purity of Frobenius. (82c:13022)
 Skubenko, B. F. (with Bakiev, K.) Translation theorem in the nonhomogeneous Minkowski problem. (Russian. English summary) (82b:10039)
 Tind, Jürgen Certain kinds of polar sets and their relation to mathematical programming. (82g:90069)
 Trotter, L. E., Jr. See Huang, H. C., (82g:90066)
 Vinberg, E. B. Invariant convex cones and orderings in Lie groups. (Russian) (82c:32034)

52A22 Random convex sets and integral geometry [See also 53C65, 60D05.]

- Burton, G. R. Skeleta and sections of convex bodies. 82g:52009
 Edwards, Robert See Mardia, K. V.; et al., 82i:52014
 Groemer, H. The average distance between two convex sets. 82g:52010
 Mardia, K. V. (with Edwards, Robert; Puri, Madan L.) Analysis of central place theory. (French summary) 82i:52014
 Puri, Madan L. See Mardia, K. V.; et al., 82i:52014
 Voß, Klaus Exakte stereologische Formeln und Näherungslösungen für konvexe Körper. (English and Russian summaries) 82j:52013

secondary classifications:

- Baladeley, Adrian Combinatorial foundations of stochastic geometry. (82d:60022)
 Begovatov, E. A. Random covering of a plane by convex figures. (Russian) (82c:60009)
 Crieu, Guy L^2 -estimation locale d'une variété support d'une mesure de probabilité. (English summary) (82b:62077)
 Coleman, Rodney Intercept lengths of random probes through boxes. (82f:60031)
 Cowan, Richard Properties of ergodic random mosaic processes. (82c:60019)
 Di Benedetto, Mario (with Speciale, Angela) On the measure of families of ellipsoids and hyperboloids. (Italian) (82c:53048)
 Edelman, Paul H. The Bruhat order of the symmetric group is lexicographically shellable. (82j:06004)
 Ehlers, P. Frank (with Enns, Ernest G.) Random secants of a convex body generated by surface randomness. (82b:60010)
 See also Enns, Ernest G., (82f:60032)
 Enns, Ernest G. (with Ehlers, P. Frank) Random paths originating within a convex region and terminating on its surface. (82f:60032)
 See also Ehlers, P. Frank, (82b:60010)
 Gloukhian, E. Moyennes distancielles dans la sphère euclidienne. (82f:60033)
 Groemer, H. The average measure of the intersection of two sets. (82c:49034)
 Hanisch, Karl-Heinz On classes of random sets and point process models. (German and Russian summaries) (82f:60124)
 Khan, A. H. (with Yaqub, Mohd.) Distribution of a distance function. (82c:60022)
 Ljajenko, N. N. Statistics of random compacta in Euclidean space. (Russian. English summary) (82f:60036)
 Mecke, Joseph Stereological formulas for manifold processes. (82m:60020)
 Moore, Marc Random sampling in pattern reconstruction. (82b:68120)
 Prékopa, Andrius Logarithmic concave measures and related topics. (82a:60022)
 Radecke, W. Some mean value relations on stationary random mosaics in the space. (82c:60020)
 Santalo, Luis Antonio Cauchy and Kubota's formula for convex bodies in elliptic n -space. (82c:53092)

- Schneider, Rolf A local formula of translative integral geometry. (82j:53119)
 Sobczyk, Kazimierz Stochastic media. Models and analysis. (82g:76040)
 Speciale, Angela See Di Benedetto, Mario, (82c:53048)
 Stoyan, Dietrich Two stochastic models for spatial patterns of geological origin. (German and Russian summaries) (82g:60024)
 Sukiasian, G. S. Processes of chords on lines intersecting random circle fields on a plane. (Russian. Armenian summary) (82f:60039)
 Tanasi, Corrado On the statistical distribution of particles contained in a convex body in E_n . (Italian) (82c:60026)
 Whittle, P. A direct derivation of the equilibrium distribution for a polymerisation process. (Russian summary) (82h:82036)
 Yaqub, Mohd. See Khan, A. H., (82c:60022)

52A25 Polyhedra and polytopes

- Altschuler, Amos (with Perles, M. A.) Quotient polytopes of cyclic polytopes. I. Structure and characterization. 82i:52015
 Avis, David On the extreme rays of the metric cone. 82b:52012
 Baracs, Janos (with Luong, T. T.; Léopold, B.; Maurice, J.) Habitat polyédrique. 82i:52008
 Barnette, David A family of neighborly polytopes. 82i:52016
 Bieri, Hanspeter Eine Charakterisierung der Polyeder. 82d:52005
 Billera, Louis J. (with Lee, Carl W.) The numbers of faces of polytope pairs and unbounded polyhedra. 82m:52005
 (with Lee, Carl W.) A proof of the sufficiency of McMullen's conditions for f -vectors of simplicial convex polytopes. 82m:52006
 See also Provan, J. Scott, 82c:52010
 Björner, Anders The minimum number of faces of a simple polyhedron. 82c:52002
 The unimodality conjecture for convex polytopes. 82d:52013
 Blind, G. (with Blind, R.) Die primitiven Polytope des \mathbb{R}^d mit $d+2$ und mit $2d-1$ Facetten. 82c:52006
 Blind, R. See Blind, G., 82c:52006
 Brehm, Ulrich Polyeder mit zehn Ecken vom Geschlecht drei. 82i:52017
 Charon, Jean-Louis See Weigel, Dominique; et al., 82c:52014
 Connelly, Robert Flexing surfaces. (See 82b:00003)
 Dreiding, André S. (with Wirth, Karl) The multiplex. A classification of finite ordered point sets in oriented d -dimensional spaces. 82c:52003
 Galulin, R. V. Holohedral varieties of simple forms of crystals. 82c:52004
 Related kinds of simple forms of crystals. (Russian) 82c:52007
 Gallivan, S. (with Lockberg, E. R.; McMullen, P.) Complete subgraphs of the graphs of convex polytopes. 82f:52009
 Gerber, Leon The volume cut off a simplex by a half-space. 82j:52014
 Goltner, Ralf Hyperbolische Transformation konvexer Polyeder. (Czech summary) 82j:52015
 Gurin, A. M. Convex polyhedra with equiangular vertices. (Russian) 82c:52014
 Hertel, Eike Zerlegungs- und Ergänzungsgleichheit von Mengen in topologischen Räumen. (Russian and English summaries) 82c:52008
 Kramer, Horst Hyperparallelogramme inscribed to convex bodies. 82i:52018
 Lee, Carl W. See Billera, Louis J., 82m:52005 and 82m:52006
 Léopold, B. See Baracs, Janos; et al., 82f:52008
 Lockberg, E. R. See Gallivan, S.; et al., 82f:52009
 Luong, T. T. See Baracs, Janos; et al., 82f:52008
 Mani, Peter (with Walkup, David W.) A 3-sphere counterexample to the W_c -path conjecture. 82a:52004
 Maurice, J. See Baracs, Janos; et al., 82f:52008
 McMullen, P. See Gallivan, S.; et al., 82f:52009
 Nef, Walter Gleichungen vom Dehn-Sommerville'schen Typ für nicht beschränkte konvexe Polytope und für Raumerzeugungen durch Hyperebenen. 82c:52009
 Perles, M. A. See Altschuler, Amos, 82i:52015
 Provan, J. Scott (with Billera, Louis J.) Decompositions of simplicial complexes related to diameters of convex polyhedra. 82c:52010
 Rigby, J. F. Multiple intersections of diagonals of regular polygons, and related topics. 82c:52004
 Schöne, W. Die Graphen der einfachen und simplizialen d -Polytope. 82c:52011
 Schulz, Christoph Geschlossene Flächen im Rand des Würfels. 82c:52012
 Schulz, Konrad Zur Oberhalbstetigkeit der Extrempunkt-Menge-Abbildung einer parameterabhängigen, polyedral konvexen Menge und einige Folgerungen. 82f:52010
 Todd, Michael J. The monotonic bounded Hirsch conjecture is false for dimension at least 4. 82c:52013
 Veysseyre, Renée See Weigel, Dominique; et al., 82c:52014
 Walkup, David W. See Mani, Peter, 82a:52004
 Walther, Hans-Joachim Note on two problems of J. Zaks concerning Hamiltonian 3-polytopes. 82c:52015
 Weigel, Dominique (with Veysseyre, Renée; Charon, Jean-Louis) Sur la détermination géométrique de l'ordre du groupe de symétrie d'un polytope de l'espace euclidien à n dimensions. (English summary) 82c:52014
 Witley, Walter Realizability of polyhedra. (French summary) 82j:52016
 Wirth, Karl See Dreiding, André S., 82c:52003
 Zaharova, N. V. Uniformly discrete systems with optimal L -triangulation. (Russian) 82b:52014

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- ApSimon, H. G. Wrapping a parcel. (82b:52016)
 Batyrev, V. V. Toric Fano threefolds. (Russian) (82m:14022)
 Belov, N. V. See Rau, V. G.; et al., (82j:82064)
 Böhm, Johannes Typisierung und Angabe eines Baukastens für Tetraeder in Räumen konstanter Krümmung. (82a:51014)
 (with Hertel, Eike) ★Polyedergeometrie in n -dimensionalen Räumen konstanter Krümmung. (German) [Geometry of polyhedra in n -dimensional spaces with constant

- curvature) (82i:52001b)
 (with Hertel, Eike) ★Polyedergemietrie in n -dimensionalen Räumen konstanter Krümmung. (German) [Geometry of polyhedra in n -dimensional spaces with constant curvature] (82i:52001a)
- Bowyer, Adrian Computing Dirichlet tessellations. (82i:52001)
- Connelly, Robert The rigidity of certain cabled frameworks and the second-order rigidity of arbitrarily triangulated convex surfaces. (82a:53059)
- Coxeter, Harold Scott MacDonald The edges and faces of a 4-dimensional polytope. (82i:51030)
- Crapo, Henry Mathematical questions concerning zonohedral space-filling. (82i:52024)
- Fonf, V. P. A property of spaces of continuous functions on segments of ordinals. (Russian) (82i:46034)
- Goethals, J.-M. (with Seidel, J. J.) The football. (82j:52010)
- Hausmann, Dirk Adjacent vertices on the b -matching polyhedron. (82e:05107)
- Hertel, Eike See Böhm, Johannes, (82i:52001a) and (82i:52001b)
- Hoffman, Alan J. Binding constraints and Helly numbers. (82d:90081)
- von Hohenbalken, B. Finding simplicial subdivisions of polytopes. (82h:52001)
- Ichishi, Tatsu On the Knaster-Kuratowski-Mazurkiewicz-Shapley theorem. (82j:55002)
- Ilijuhin, V. V. See Rau, V. G.; et al., (82j:82064)
- Kirkpatrick, David G. Efficient computation of continuous skeletons. (See 82a:68004)
- Kleinschmidt, Peter Eine geometrische Interpretation einer Ringinvarianten. (82a:13006)
- Marcus, Daniel A. Minimal positive 2-spanning sets of vectors. (82h:15002)
- McMullen, P. Convex bodies which tile space by translation. (82c:52016)
- Pachner, Udo Untersuchungen über die Dualität zwischen Schnitten und Submannigfaltigkeiten konvexer Polytope und allgemeinerer kombinatorischer Mannigfaltigkeiten. (82e:57007)
- Über die bistellare Äquivalenz simplizialer Sphären und Polytope. (82i:57018)
- Rau, V. G. (with Sedov, B. B.; Ilijuhin, V. V.; Belov, N. V.) On an incomplete Patterson function. (Russian) (82j:82064)
- Richter, Wolf Jürgen Prochiralität und symmetrische Induktion. (82j:92066)
- Rivest, Ronald L. See Yao, Andrew Chi Chih, (82h:68071)
- Ruscitti, Aldo Problems of classification and connection in a class of planar graphs with hexagonal faces. (Italian. English summary) (82b:05092)
- Schneider, Rolf (with Wieacker, John André) Approximation of convex bodies by polytopes. (82g:52008)
- Sedov, B. B. See Rau, V. G.; et al., (82j:82064)
- Seidel, J. J. See Goethals, J.-M., (82j:52010)
- Stewart, B. M. ★Adventures among the toroids. (82h:51028)
- Szabó, Sándor Finite abelian groups and n -dimensional mosaics. (Hungarian) (82i:20065)
- Tasmuratov, S. S. Some estimates of total mean curvature for isometric realizations of nets. (Russian) (82g:53068)
- Térouanne, Eric On a class of "impossible" figures: a new language for a new analysis. (82b:92046)
- Trigg, Charles W. Magic cuboctahedrons. (See 82b:00003)
- Watson, D. F. Computing the n -dimensional Delaunay tessellation with application to Voronoi polytopes. (82f:52002)
- Wieacker, John André See Schneider, Rolf, (82g:52008)
- Wunderlich, Walter Neue Wackelkosaeder. (82d:51012)
- Wackelkosaeder. (82h:51013)
- Yao, Andrew Chi Chih (with Rivest, Ronald L.) On the polyhedral decision problem. (82h:68071)
- 52A30 Invariants of convex sets (star-shaped, (m, n) -convex, etc.)
- Breen, Marilyn Admissible kernels for starshaped sets. 82j:52017
- Hadeler, K. P. (with Meinardus, Günter) On the roots of Cauchy polynomials. 82k:52016
- Ho, Chung Wu Deforming star-shaped polygons in the plane. 82e:52005
- Kleinschmidt, Peter (with Pachner, Udo) Shadow-boundaries and cuts of convex polytopes. 82d:52006
- Meinardus, Günter See Hadeler, K. P., 82k:52016
- Pachner, Udo See Kleinschmidt, Peter, 82d:52006
- Toranzos, Fausto A. Approximation of compact star-shaped sets by special families. (Spanish. English summary) 82a:52007
- secondary classifications:
- Breen, Marilyn ($d-2$)-extreme points and a Helly-type theorem for starshaped sets. (82c:52015)
- Haydon, R. (with Odell, E.; Sternfeld, Y.) A fixed point theorem for a class of star-shaped sets in C_0 . (82c:47070)
- Odell, E. See Haydon, R.; et al., (82c:47070)
- Sternfeld, Y. See Haydon, R.; et al., (82c:47070)
- 52A35 Helly type theorems
- Breen, Marilyn ($d-2$)-extreme points and a Helly-type theorem for starshaped sets. 82c:52015
- Katchalski, Meir Thin sets and common transversals. 82a:52005
- Kleinjohn, Norbert Remark on the Helly number for strongly convex sets on Riemannian manifolds. 82i:52019
- Lewis, Ted Two counterexamples concerning transversals for convex subsets of the plane. 82e:52006
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- Bárány, Imre (with Šlosman, S. B.; Szűcs, András) On a topological generalization of a theorem of Tverberg. (82d:55001)
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- Critchley, Frank Optimal norm characterisations of multidimensional scaling methods and some related data analysis problems. (French summary) (See 82f:62004)
- Croke, Christopher B. The first eigenvalue of the Laplacian for plane domains. (82c:35061)
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- Krautwald, Walter Kennzeichnungen der affinen Bilder von Körpern konstanter Breite. (English summary) (82j:52012)
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- Vogt, Andrew The isoperimetric inequality for curves with self-intersections. (82g:53005)
- Wesolowski, G. O. See Dreznar, Zvi. (82f:51015)
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- Woodall, D. R. Dividing a cake fairly. (82f:28006)

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- Mighele, A. D. See Santoro, A.; et al. (82b:52018)
- Rodgers, J. R. See Santoro, A.; et al. (82b:52018)
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- Cusick, T. W. View-obstruction problems. II. (82m:10053)
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- Ullrich, Hans Jürgen See Geise, Gerhard. (82m:51024)

52A45 Packing, covering, tiling [See also 05B40, 05B45, 10E30, 51-XX.]

- Adler, Andrew (with Holroyd, F. C.) Some results on one-dimensional tilings. (82i:52022)
- Baracs, János Juxtapositions. (French summary) (82c:52020a)
- See also Grünbaum, Branko; et al. (82c:52020b)
- Bezdek, Károly Mosaics with each face having the same number of neighbors. (Hungarian) (82c:52023)
- Bouwkamp, C. J. Packing handed pentacubes. (See 82b:00003)
- Chaiken, Seth (with Kleitman, Daniel J.; Saks, Michael E.; Shearer, James B.) Covering regions by rectangles. (82m:52007)
- Crapo, Henry Mathematical questions concerning zonohedral space-filling. (82i:52024)
- Csöka, G. The number of congruent spheres that cover a given sphere of three-dimensional space is not less than 30. (Russian) (82m:52008)
- Debroey, Ingrid (with Landuyt, F.) Equitransitive edge-to-edge tilings by regular convex polygons. (82c:52011)
- Debrunner, Hans E. Über Zerlegungsgleichheit von Pflasterpolyedern mit Würfeln. (82c:52012)
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- Emmian, Vahé See Granche, Pierre. (82f:52014)
- Engel, Peter Über Wirkungsbereichsteilungen von kubischer Symmetrie. (English summary) (82i:52025)
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- Fields, K. L. The fragile lattice packings of spheres in three-dimensional space. (82c:52015a)
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- Fischer, Werner (with Koch, Elke) Geometrical packing analysis of molecular compounds. (82c:52016)
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- Kugeln. (82m:52009)
- Goldberg, Michael On the space-filling octahedra. (82c:52014)
- Golser, Georg Dichteste Kugelpackungen im Oktaeder. (82c:52017)
- Graham, Ronald L. Fault-free tilings of rectangles. (See 82b:00003)
- Granche, Pierre (with Emmian, Vahé) Ville polyédrique. (82i:52014)
- Groemer, H. On coverings of convex sets by translates of slabs. (82i:52027)
- Grünbaum, Branko (with Shephard, Geoffrey C.) Some comments on: "Juxtapositions" [Structural Topology 1979, no. 1, 59-72] by J. Baracs. (82c:52020b)
- (with Shephard, Geoffrey C.) Some problems on plane tilings. (See 82b:00003)
- Heppes, A. See Fejes Tóth, L. (82c:52014)
- Hoffman, D. G. Packing problems and inequalities. (See 82b:00003)
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- Kleitman, Daniel J. See Chaiken, Seth; et al. (82m:52007)
- Koch, Elke See Fischer, Werner. (82c:52016)
- Landuyt, F. See Debroey, Ingrid. (82c:52011)
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- Molnár, J. On the packing of unit circles in a convex domain. (82c:52019)
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- Rebman, Kenneth How to get (at least) a fair share of the cake. (See 82c:00006)
- Robinson, Raphael M. Can cubes avoid meeting face to face? (See 82b:00003)
- Saks, Michael E. See Chaiken, Seth; et al. (82m:52007)
- Schattschneider, Doris In praise of amateurs. (See 82b:00003)
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- Szabó, Sándor On decomposing finite abelian groups. (82c:52017)
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- Anstey, Robert L. (with Pachut, Joseph F.) Fourier packing ordinate: a univariate size-independent measurement of the polygonal packing variation in Paleozoic bryozoans. (82a:92001)
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- Bailey, R. A. See Williams, E. R. (82h:92050)
- Balas, Egon Cutting planes from conditional bounds: a new approach to set covering. (82c:90060a)
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- Bentley, Jon Louis (with Weide, Bruce W.; Yao, Andrew Chi Chih) Optimal expected-time algorithms for closest point problems. (82g:68084)
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- Bulić, S. F. (with Volčenkova, S. G.) Optimal plane packings of trees. (Russian) (82g:65032)
- Coffman, Edward G., Jr. (with Garey, M. R.; Johnson, D. S.; Tarjan, Robert Endre) Performance bounds for level-oriented two-dimensional packing algorithms. (82a:68068)
- Costa, M. M. R. R. See Alte da Veiga, L. M.; et al. (82d:82071)
- Cusick, T. W. View-obstruction problems. II. (82m:10053)
- Derfel, N. A. Coverings of finite multiplicity. (Russian) (82c:31011)
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- Fowler, Robert J. (with Paterson, Michael S.; Tanimoto, Steven L.) Optimal packing and covering in the plane are NP-complete. (82c:05112)
- Frederickson, Greg N. Probabilistic analysis for simple one- and two-dimensional bin packing algorithms. (82c:68019)
- Garey, M. R. See Coffman, Edward G., Jr.; et al. (82a:68068)
- Golan, Igal Performance bounds for orthogonal oriented two-dimensional packing algorithms. (82m:68066)
- Grünbaum, Branko (with Shephard, Geoffrey C.) Patterns on the 2-sphere. (82m:51025)
- (with Shephard, Geoffrey C.) A hierarchy of classification methods for patterns. (82j:05048)
- Hasegawa, Masami (with Tanemura, Masaharu) Spatial patterns of territories. (82i:92042)
- Ho, Andrew See Balas, Egon. (82c:90060b)
- Holladay, Kenneth A partition theory of planar animals. (82g:92006)
- Johnson, D. S. See Coffman, Edward G., Jr.; et al. (82a:68068)
- Klamkin, Murray S. (with Liu, Andy C. F.) Note on a result of Niven on impossible tessellations. (82d:05053)
- Košelev, V. N. Hierarchical coding of discrete sources. (82m:94031)
- Leeuw, P. See Duijvestijn, A. J. W. (82j:05047)
- Lipski, Witold, Jr. (with Preparata, Franco P.) Efficient algorithms for finding maximum matchings in convex bipartite graphs and related problems. (82m:68069)
- Liu, Andy C. F. See Klamkin, Murray S. (82d:05053)
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 Skubenko, B. F. Dense lattice packings of spheres in Euclidean spaces of dimension $n \leq 16$. (Russian) (82d:10044)

A remark on the upper bound of the Hermite constant for the densest lattice packing of spheres. (Russian) (82d:10045)

- Tanemura, Masaharu See Hasegawa, Masami, (82f:92042)
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 Terao, Hiroaki Free arrangements of hyperplanes and unitary reflection groups. (82e:32018a)
 Generalized exponents of a free arrangement of hyperplanes and Shepherd-Todd-Brieskorn formula. (82e:32018b)
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 Weide, Bruce W. See Bentley, Jon Louis; et al., (82g:68084)
 Williams, E. R. (with Bailey, R. A.) A note on designs for neighbor configurations. (82h:92050)
 Yao, Andrew Chi Chih See Bentley, Jon Louis; et al., (82g:68084)

52A50 Hilbert geometry [See also 51Kxx.]

secondary classifications:

- Deák, J. Examples for nonorderly spaces. (82e:54020)
 Townsend, S. P. Every 5-coloured map in the plane contains a monochrome unit. (82j:05060)

52A55 Spherical and hyperbolic convexity

- Lettl, Günter Isometrien des Raumes der konvexen Teilmengen der Sphäre. 82b:52019

52A99 Miscellaneous topics

- Gage, Michael E. On Gehring's linked sphere problem. 82j:52024
 Kronheimer, E. H. (with Kronheimer, P. B.) The tripos problem. 82j:52025
 Kronheimer, P. B. See Kronheimer, E. H., 82j:52025
 Schöpl, Peter Konvexitätstreue Abbildungen. 82h:52007

secondary classifications:

- Jaromczyk, Jerzy W. Linear decision trees are too weak for convex hull problem. (82j:52001)

53-XX DIFFERENTIAL GEOMETRY (For differential topology, see 57Rxx. For foundational questions of differentiable manifolds, see 58Axx.)

53-01 Elementary exposition, textbooks

- Akivis, M. A. ★Многомерная дифференциальная геометрия. (Russian) [Multidimensional differential geometry] 82e:53001
 Bishop, Richard L. (with Goldberg, Samuel I.) ★Tensor analysis on manifolds. 82g:53001
 Brauner, Heinrich ★Differentialgeometrie. (German) [Differential geometry] 82h:53001
 Goldberg, Samuel I. See Bishop, Richard L., 82g:53001
 Hess, Siegfried (with Köhler, Walter) ★Formeln zur Tensor-Rechnung. (German) [Formulas for tensor calculus] 82j:53001
 Köhler, Walter See Hess, Siegfried, 82j:53001
 Laugwitz, Detlef ★Differentialgeometrie. (German) [Differential geometry] 82b:53001
 Spallek, Karlheinz ★Kurven und Karten. (German) [Curves and maps] 82g:53002
 Spivak, Michael ★A comprehensive introduction to differential geometry. Vol. I. 82g:53003a
 ★A comprehensive introduction to differential geometry. Vol. II. 82g:53003b
 ★A comprehensive introduction to differential geometry. Vol. III. 82g:53003c
 ★A comprehensive introduction to differential geometry. Vol. IV. 82g:53003d
 ★A comprehensive introduction to differential geometry. Vol. V. 82g:53003e
 Walczak, Paweł Grzegorz (with Waliszewski, Włodzimierz) ★Geometria różniczkowa w zadaniach. (Polish) [Differential geometry in problems] 82e:53001
 Waliszewski, Włodzimierz See Walczak, Paweł Grzegorz, 82e:53001

secondary classifications:

- Demazure, Michel ★Calcul différentiel. (French) [Differential calculus] (82f:58001)
 Efimov, N. V. ★Higher geometry. (82e:51001)
 Hrusa, W. (with Troutman, J. L.) Elementary characterization of classical minima. (82f:49001)
 (Lepa, Eugene) See Maurin, Krzysztof, (82i:00003)
 Maurin, Krzysztof ★Analysis. Part II. (82i:00003)
 Sikorski, Roman ★Rachunek różniczkowy i całkowy. (Polish) [Differential and integral calculus] (82a:26002)
 (Sinha, P. C.) See Efimov, N. V., (82e:51001)
 Troutman, J. L. See Hrusa, W., (82f:49001)

53-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

- Beem, John K. (with Ehrlich, Paul E.) ★Global Lorentzian geometry. (82i:53051)

- Chern, Shiing Shen ★Selected papers. (82h:01074)
 Ehrlich, Paul E. See Beem, John K., (82i:53051)
 (Griffiths, Phillip A.) See Chern, Shiing Shen, (82h:01074)
 (Weil, André) See Chern, Shiing Shen, (82h:01074)
 (Wu, Hung Hsi) See Chern, Shiing Shen, (82h:01074)

Bibliography:

- Chern, Shiing Shen See Chern, Shiing Shen, (82h:01074)
 Kagel ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)

Proceedings:

- Summer School on Yang-Mills Equations ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)

Summer School:

- Yang-Mills Equations ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)

- Yang-Mills equations ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)

53-03 Historical (must also be assigned at least one classification number from Section 01)

- Chern, Shiing Shen Chern's after-dinner speech. 82f:53001

secondary classifications:

- Boothby, William M. (with Chern, Shiing Shen; Wang, S. P.) The mathematical work of H. C. Wang. (82f:01081)
 (Buffon, Georges Louis) See Roger, Jacques, (82e:01056) and Holgate, Philip, (82m:01040)
 Chern, Shiing Shen ★Selected papers. (82h:01074)
 General relativity and differential geometry. (See 82d:83002)
 See also Boothby, William M.; et al., (82f:01081)
 (Einstein, Albert) See Albert Einstein and the theory of gravitation, (82a:83002)
 (Gauß, Carl Friedrich) See Klingenberg, Wilhelm, (82d:01016)
 Gray, Jeremy A note on Karl M. Peterson. (82k:01023)
 (Griffiths, Phillip A.) See Chern, Shiing Shen, (82h:01074)
 Holgate, Philip Studies in the history of probability and statistics. XXXIX. Buffon's cycloid. (82m:01040)
 Klingenberg, Wilhelm Die Bedeutung von Gauß für die Entwicklung der Geometrie. (82d:01016)
 (Kuranski, E.) See Albert Einstein and the theory of gravitation, (82a:83002)
 Marcus, Froim On a metric of E. Kähler. (Italian summary) (82i:53053)
 Nakagawa, Hisao Global study of Riemannian manifolds. The achievements of Katsuhiko Shiohama, the recipient of the 8th Iyanaga Prize of the Mathematical Society of Japan. (Japanese) (82i:01057)
 (Peterson, Karl M.) See Gray, Jeremy, (82k:01023)
 Predvoditelev, A. S. On Riemannian manifolds. (Russian. English summary) (82e:01039)
 (Ribaucour, Albert) See Rouxel, Bernard, (82f:01054)
 Roger, Jacques Buffon and mathematics. (82e:01056)
 Rouxel, Bernard L'œuvre mathématique d'Albert Ribaucour. (82f:01054)
 (Shiohama, Katsuhiko) See Nakagawa, Hisao, (82i:01057)
 Vizgin, V. P. ★Релятивистская теория тяготения. (Russian) [The relativistic theory of gravitation] (82m:01051)
 (Wang, Hsien Chung) See Boothby, William M.; et al., (82f:01081)
 Wang, S. P. See Boothby, William M.; et al., (82f:01081)
 (Weil, André) See Chern, Shiing Shen, (82h:01074)
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 Chern, Shiing Shen See Chern, Shiing Shen, (82h:01074)
 Ribaucour, Albert See Rouxel, Bernard, (82f:01054)
 Wang, Hsien Chung See Boothby, William M.; et al., (82f:01081)
 Biography:
 Ribaucour, Albert See Rouxel, Bernard, (82f:01054)
 Albert Einstein and the theory of gravitation ★Альберт Эйнштейн и теория гравитации. (Russian) [Albert Einstein and the theory of gravitation] (82a:83002)
 Gravitation ★Альберт Эйнштейн и теория гравитации. (Russian) [Albert Einstein and the theory of gravitation] (82a:83002)
 Studies in the history of probability and statistics See Holgate, Philip, (82m:01040)

53-04 Explicit machine computation and programs (not the theory of computation or programming)

- Banchoff, Thomas F. Computer animation and the geometry of surfaces in 3- and 4-space. 82b:53002
 Hosaka, Mamoru (with Kimura, Fumihiko) A theory and methods for three-dimensional free form shape construction. 82b:53003
 Kimura, Fumihiko See Hosaka, Mamoru, 82b:53003

secondary classifications:

- Åman, Jan E. (with Karlhede, Anders) A computer-aided complete classification of geometries in general relativity. First results. (82a:83010)
 Filafiev, A. S. Approximate construction of the closed boundary of the region of the Earth's surface that can be reached by an aircraft. (Russian) (82j:90087)
 Karlhede, Anders See Åman, Jan E., (82a:83010)

53-06 Proceedings, conferences, etc.

- (Atanasian, L. S.) See Geometry of imbedded manifolds, 82e:53002
 (Bernier, A. L.) See Modern geometry, 82e:53003
 (Fedorov, V. D.) See Studies in geometry and algebra, 82b:53004

- (Forn, Dirk) See *Global differential geometry and global analysis*, 82i:53001
- (Gambrelidze, R. V.) See *Problems in geometry*, 82i:53054a
- (Hano, Jun-ichi) See *Manifolds and Lie groups*, 82i:53001
- (Kühnel, Wolfgang) See *Global differential geometry and global analysis*, 82i:53001
- (Matsushima, Yoob) See *Manifolds and Lie groups*, 82i:53001
- (Morimoto, A.) See *Manifolds and Lie groups*, 82i:53001
- (Murakami, Shingo) See *Manifolds and Lie groups*, 82i:53001
- (Nazarov, H. H.) See *Differential geometry of manifolds*, 82i:53002
- (Okamoto, K.) See *Manifolds and Lie groups*, 82i:53001
- (Ostianu, N. M.) See *Problems in geometry*, 82i:53002
- (Oreki, H.) See *Manifolds and Lie groups*, 82i:53001
- (Popescu, I. P.) See *Proceedings: National Seminar on Finsler Spaces*, 82i:53002
- (Selehov, A. M.) See *Differential geometry*, 82i:53001 and *Webs and quasigroups*, 82i:53003
- (Simon, Udo) See *Global differential geometry and global analysis*, 82i:53001
- (Wegner, Bernd) See *Global differential geometry and global analysis*, 82i:53001
- Algebra** ★Исследования по геометрии и алгебре. (Russian) [Studies in geometry and algebra] 82i:53004
- Berlin** ★Global differential geometry and global analysis. 82i:53001
- Birthday:**
- Matsushima, Yoob ★Manifolds and Lie groups. 82i:53001
- Brasov ★The Proceedings of the National Seminar on Finsler Spaces. 82i:53002
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- Colloquium:**
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- Geometry and Topology ★Proceedings of the Colloquium on Geometry and Topology. (Romanian) 82i:53003
- Global Differential Geometry and Global Analysis ★Global differential geometry and global analysis. 82i:53001
- Conference:**
- Geometry ★Manifolds and Lie groups. 82i:53001
- Differential geometry** ★Дифференциальная геометрия. (Russian) [Differential geometry] 82i:53001
- ★Современная геометрия. (Russian) [Modern geometry] 82i:53003
- Differential geometry of manifolds ★Дифференциальная геометрия многообразий. (Russian) [Differential geometry of manifolds] 82i:53002
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- Geometry ★Исследования по геометрии и алгебре. (Russian) [Studies in geometry and algebra] 82i:53004
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- ★Проблемы геометрии. Том 9. (Russian) [Problems in geometry. Vol. 9] 82i:53054a
- Geometry of imbedded manifolds ★Геометрия погруженных многообразий. (Russian) [Geometry of imbedded manifolds] 82i:53002
- Global differential geometry and global analysis ★Global differential geometry and global analysis. 82i:53001
- Graz ★1. Geometric-Kolloquium. (German) [First Geometry Colloquium] 82i:53004
- Imbedded manifolds ★Геометрия погруженных многообразий. (Russian) [Geometry of imbedded manifolds] 82i:53002
- Itoji Nauki i Tehniki ★Проблемы геометрии. Том 9. (Russian) [Problems in geometry. Vol. 9] 82i:53054a
- ★Проблемы геометрии. Том 12. (Russian) [Problems in geometry. Vol. 12] 82i:53002
- Manifolds and Lie groups ★Manifolds and Lie groups. 82i:53001
- Modern geometry ★Современная геометрия. (Russian) [Modern geometry] 82i:53003
- Notre Dame, Ind. ★Manifolds and Lie groups. 82i:53001
- Problems in geometry ★Проблемы геометрии. Том 9. (Russian) [Problems in geometry. Vol. 9] 82i:53054a
- ★Проблемы геометрии. Том 12. (Russian) [Problems in geometry. Vol. 12] 82i:53002
- Proceedings:**
- Colloquium on Geometry and Topology ★Proceedings of the Colloquium on Geometry and Topology. (Romanian) 82i:53003
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- Finsler Spaces ★The Proceedings of the National Seminar on Finsler Spaces. 82i:53002
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- Symposium:**
- Differential Geometry of Submanifolds ★Differential geometry of submanifolds. (Japanese) 82i:53001
- Topology ★Proceedings of the Colloquium on Geometry and Topology. (Romanian) 82i:53003
- Webs and quasigroups ★Ткани и квазигруппы. (Russian) [Webs and quasigroups] 82i:53003
- secondary classifications:
- (Byrnes, Christopher I.) See *Geometrical methods for the theory of linear systems*, (82i:53003)
- (Doehner, Heinz-Dietrich) See *Differential geometric methods in mathematical physics*, (82i:81004)
- (Martin, Clyde F.) See *Geometrical methods for the theory of linear systems*, (82i:93003)

Cambridge, Mass. ★Geometrical methods for the theory of linear systems. (82i:93003)

Clausthal-Zellerfeld ★Differential geometric methods in mathematical physics. (82i:81004)

Conference:

- Differential Geometric Methods in Mathematical Physics ★Differential geometric methods in mathematical physics. (82i:81004)
- Nonlinear Problems in Geometry ★Nonlinear problems in geometry. (82i:58001)
- Differential geometric methods in mathematical physics ★Differential geometric methods in mathematical physics. (82i:81004)
- Geometrical methods for the theory of linear systems ★Geometrical methods for the theory of linear systems. (82i:93003)
- Geometry ★Nonlinear problems in geometry. (82i:58001)
- Katata ★Nonlinear problems in geometry. (82i:58001)
- Mathematical physics ★Differential geometric methods in mathematical physics. (82i:81004)

NATO Advanced Study Institute:

- Geometrical Methods for the Theory of Linear Systems ★Geometrical methods for the theory of linear systems. (82i:93003)

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- Division of Mathematics of the Taniguchi Foundation ★Nonlinear problems in geometry. (82i:58001)

53Axx Classical differential geometry

Navickis, K. V. See Vaškas, P. Ju., 82i:53002

Vaškas, P. Ju. (with Navickis, K. V.) Geometry of ruled manifolds and the theory of nets. (Russian. Lithuanian and English summaries) 82i:53002

secondary classifications:

Akivis, M. A. ★Многомерная дифференциальная геометрия. (Russian) [Multidimensional differential geometry] (82i:53001)

53A04 Curves in Euclidean space

Asisoff, Per Chord-midpoint curve and tangent-intersection curve. (Danish. English summary) 82i:53001

Bitay, L. Sur la torsion des courbes qui sont tracées sur une surface. (Romanian summary) [On the torsion of curves traced on a surface] 82i:53002

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Cleave, John P. The form of the tangent-developable at points of zero torsion on space curves. 82i:53002

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Hwang, Cheng Chung A differential-geometric criterion for a space curve to be closed. 82i:53004

Müller, Hans Robert Erweiterung des Satzes von Holditch für geschlossene Raumkurven. 82i:53003

Nicolae, Soare On helices in real and complex Euclidean spaces of odd dimension. 82i:53004

Niculescu, Al. A class of Bertrand curves. (Romanian. French summary) 82i:53004

Penna, Michael A. Total torsion. 82i:53005

Protic, Lj. (with Bokan, Neda) CH flat curves in Euclidean space E^{2n+1} . 82i:53002

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A remark on strips. II. 82i:53003b

Vogt, Andrew The isoperimetric inequality for curves with self-intersections. 82i:53005

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secondary classifications:

Bruce, J. W. On singularities, envelopes and elementary differential geometry. (82i:58018)

Kovalev, M. D. A characteristic property of a disc. (Russian) (82i:52007)

Sedyh, V. D. Structure of the convex hull of a space curve. (Russian. English summary) (82i:32022)

53A05 Surfaces in Euclidean space

Aliev, N. Ja. On the geometry of mappings of surfaces of Euclidean spaces. (Russian) 82i:53006

Amante Contino, V. On the surfaces which correspond to each other by orthogonality of line elements. (Italian. English summary) 82i:53005

Arca, Giuseppe La determinazione delle superfici doppie d'una immersione a connessione normale plate dans un espace euclidien à quatre dimensions. (Italian summary) 82i:53005

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Brauer, Heinrich Abbildungen aus Regelflächen. 82i:53003

Cecil, Thomas E. (with Ryan, Patrick J.) Conformal geometry and the cyclides of Dupin. 82i:53004

Constantinescu, Tiberiu Eine Eigenschaft für die Tensoren auf eine Fläche. 82i:53032

Danelić, I. A. (with Dolženkov, V. A.) Absolute mean integral curvature of a surface of revolution. (Russian) 82i:53003

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- Fomin, G. A. See Kamenskii, N. P., 82f:53005
- Gürses, Metin (with Nutku, Yavuz) New nonlinear evolution equations from surface theory. 82j:53002
- Hasanis, Thomas A new characterization of the sphere in \mathbb{R}^3 . 82b:53006
- Janyška, Josef On linear functions on the sphere S^2 . 82c:53006
- Jarahmedov, G. A. Structure of plane sections of polyhedral contracting surfaces. (Russian) 82j:53004
- Kamenskii, N. P. (with Fomin, G. A.) A generalization of surfaces of revolution of constant curvature. (Russian) 82f:53005
- Kergosien, Yannick Louis (with Thom, René) Sur les points paraboliques des surfaces. (English summary) 82a:53003a
- See also Banchoff, Thomas F.; et al., 82a:53003b
- Kim, V. S. Some conditions for convexity of a hypersurface of the class $C^1 \cap W^{(2)}_p$ in E^{n+1} . (Russian) 82f:53006
- Kovancev, M. I. Construction of a surface of negative curvature in the neighborhood of a cuspidal edge. (Russian) 82i:53003
- Kovancev, N. I. Surfaces of negative curvature with a rectilinear cuspidal edge. (Russian) 82j:53005
- Kuharčík, N. G. Smoothness of the cuspidal edge of a developable surface constructed on outlines lying in parallel planes. (Russian) 82c:53004
- Kühnel, Wolfgang Tight and 0-tight polyhedral embeddings of surfaces. 82b:53004
- Zur inneren Krümmung der zweiten Grundform. (English summary) 82g:53007
- Matush, Josef (with Novák, Josef) Über eine elementare Fläche. (English, Russian and Czech summaries) 82c:53007
- Meirer, Klaus Über windschiefe Flächen mit ausgezeichneten Scharen ebener Kurven. 82j:53006
- Mozarskii, V. V. Investigation of the behavior of a surface in the neighborhood of a cuspidal edge of the first kind. (Ukrainian, English and Russian summaries) 82c:53005
- Nikolaevskaja, T. E. Study of a pair of congruences in E_3 , adjoined to a surface V_2 in E_4 . (Russian) 82f:53007
- Novák, Josef See Matush, Josef, 82c:53007
- Novotný, Pavel A transformation of a sphere. (Slovak) 82b:53007
- Nutku, Yavuz See Gürses, Metin, 82i:53002
- Obuhova, V. S. Parametrization and canonical form of the equation of the torse T_3^4 . (Russian) 82b:53008
- Paukowitz, Hans Peter Eine Kennzeichnung der Regel- und Gesimsflächen. (English summary) 82j:53007
- Piccoletti, Lia Fioravanti On the vertices of surfaces of n -dimensional Euclidean space. (Italian, English summary) 82i:53004
- Pylarinos, Othon Sur les surfaces représentatives des fonctions harmoniques. 82b:53005
- Rozendorn, È. R. On the imbedding of two-dimensional Riemannian metrics into a four-dimensional Euclidean space. (Russian, English summary) 82c:53008
- Ryan, Patrick J. See Cecil, Thomas E., 82f:53004
- Sabuncuoğlu, Arif On the Joachimsthal's theorems. (Turkish summary) 82c:53006
- Semin, F. Note sur les réseaux de Tissot. (Turkish summary) 82c:53005
- Serkuziev, M. The analytic nondeformability of surfaces fastened along a curve on the surface relative to a point and a plane. (Russian) 82b:53006
- Skidan, I. A. Quasihelical, cyclic and canal G -surfaces. 82c:53006
- Sovetkov, P. I. Reconstruction in pseudo-Euclidean space of surfaces with a given sum of the principal radii of curvature and boundary conditions. (Russian) 82c:53009
- Thom, René See Kergosien, Yannick Louis, 82a:53003a and Banchoff, Thomas F., 82a:53003b
- Vogel, W. O. Eine Klasse von Ellipsenflächen. 82c:53010
- Vogler, Hans Regelflächen mit besonderen ebenen Kurven. I. Regelflächen mit durchwegs isotropen Erzeugenden und ebenen Falllinien. 82b:53009
- Räumliche Zwangsläufe mit ebenen Bahnkurven. 82j:53008
- Wintgen, Peter Courbure totale des surfaces ayant des singularités. (English summary) 82d:53007
- Wunderlich, Walter Regelflächen mit oskulierendem Striktionsband. 82b:53010
- secondary classifications:
- Bitay, L. Sur la torsion des courbes qui sont tracées sur une surface. (Romanian summary) [On the torsion of curves traced on a surface] 82m:53002
- Crampin, Michael (with Hodgkin, Luke; Robinson, David Clyde; McCarthy, Patrick J.) 2-manifolds of constant curvature, 3-parameter isometry groups and Bäcklund transformations. (82m:58001)
- Dmitriev, V. G. On the construction of an \mathcal{K}_{n-1} -almost everywhere convex hypersurface in \mathbb{R}^{n+1} . (Russian) (82m:53052)
- Dolan, B. P. A class of $SU(2)$ instanton configurations in curved space-times. (82g:53039)
- Frolow, Igor Infinitesimal contact transformations and their applications to abstract growth patterns. (82j:52004)
- Hodgkin, Luke See Crampin, Michael; et al., (82m:58001)
- Karpman, V. I. (with Solov'ev, V. V.) The influence of perturbations on the shape of a sine-Gordon soliton. (82a:53008)
- Kovancev, A. N. Nets that are determined by nonlinear projection operators. (Russian) (82m:53017)
- Langvin, Rémi (with Lê Dũng Tráng) Courbure au voisinage d'une singularité. (English summary) (82i:32025)
- Leaute, B. (with Marichal, G.; Skinazi, J.) Sur une solution particulière transcendante de l'équation de "sinus-Gordon". [On a particular transcendent solution of the "sine-Gordon" equation] (82i:35156)
- Lê Dũng Tráng See Langvin, Rémi, (82i:32025)
- Marichal, G. See Leaute, B.; et al., (82i:35156)
- McCarthy, Patrick J. See Crampin, Michael; et al., (82m:58001)
- Mishra, Ratan Shanker See Pandey, Kanti, (82f:76021)
- Mitrofanova, E. A. The group $A_{n-1}(n)$ and its representations. (Russian) (82a:22008)
- Özdeğer, Abdülkadir A hexagonal 6-web on a surface whose asymptotic lines form a rhombic net. (Turkish summary) (82j:53029)
- Pandey, Kanti (with Mishra, Ratan Shanker) Gradients behind three-dimensional pseudostationary shock-waves in radiating gases. (82f:76021)
- Podgornova, E. G. The intrinsic geometry of a noncompact evolute. (Russian) (82j:53105)
- Robinson, David Clyde See Crampin, Michael; et al., (82m:58001)
- Rouxel, Bernard Ruled β -surfaces in Euclidean space E^n . (82j:53011)
- Schneider, Rolf Zur optimalen Approximation konvexer Hyperflächen durch Polyeder. (82m:52003)
- Sharma, V. D. (with Shyam, Radhe) Nonequilibrium relaxing gas flow behind three-dimensional unsteady curved shock wave. (82c:76075)
- Shyam, Radhe See Sharma, V. D., (82c:76075)
- Šikin, E. V. Isometric embedding of two-dimensional manifolds of negative curvature by the Darboux method. (Russian) (82m:53059)
- Skinazi, J. See Leaute, B.; et al., (82i:35156)
- Solov'ev, V. V. See Karpman, V. I., (82c:35008)
- Tenenblat, Keti (with Terng, Chuu Lian) Bäcklund's theorem for n -dimensional submanifolds of \mathbb{R}^{2n+1} . (82j:58068)
- Terng, Chuu Lian A higher dimension generalization of the sine-Gordon equation and its soliton theory. (82j:58069)
- See also Tenenblat, Keti, (82j:58068)
- Togawa, Yoshio A geometric study of the D -stability problem. (82a:15018)
- Vianello, Maurizio On the equilibrium of a non-simply connected membrane with constant curvature. (Italian, English summary) (82h:73060)
- 53A07 Higher-dimension and -codimension surfaces in Euclidean n -space
- Aumann, Günter Zur Theorie der $(k+1)$ -Gratregelflächen. [On the theory of $(k+1)$ -edge ruled surfaces] 82m:53004
- Die Minimalhyperregelflächen. (English summary) 82b:53007
- Bazylev, V. T. On partial mappings of Euclidean spaces. (Russian, English summary) 82j:53009
- Borisov, A. V. Integral formulas for a convex hypersurface in E_n . (Russian) 82b:53008
- Damon, Victor Integral characterizations and the theory of curves. 82c:53007
- Frank, Hubert (with Linsin, Iris) Hauptregelflächen einer verallgemeinerten Regelfläche mit Zentralregelfläche. (English summary) [Principal ruled surfaces of a generalized ruled surface with a central ruled surface] 82m:53005
- Gorelik, E. M. Metric foliations of a Euclidean space. (Russian) 82j:53010
- Korobeynikov, V. S. Podal mappings of families of hyperplanes and lines in E_n . (Russian) 82b:53011
- Generalized pedal mappings. (Russian) 82f:53008
- Linsin, Iris See Frank, Hubert, 82m:53005
- Milman, David (with Waksman, Zeev) On topological properties of the central set of a bounded domain in \mathbb{R}^n . 82g:53006
- Svoboda, Karel Characterizations of the sphere in E^4 by means of the pseudoparallel mean curvature vector field. (Czech summary) 82c:53008
- Waksman, Zeev See Milman, David, 82g:53006
- Wegner, Bernd Einige Bemerkungen zur Geometrie transnormaler Mannigfaltigkeiten. [Some remarks on the geometry of transnormal manifolds] 82k:53007
- Weiner, Joel L. A uniqueness theorem for submanifolds of Euclidean space. 82c:53011
- secondary classifications:
- Aminov, Ju. A. Grassmann transform of a two-dimensional surface in four-dimensional Euclidean space. (Russian) (82j:53093)
- Berger, Eric (with Bryant, Robert; Griffiths, Phillip A.) Some isometric embedding and rigidity results for Riemannian manifolds. (82b:53074)
- Bryant, Robert See Berger, Eric; et al., (82b:53074)
- Griffiths, Phillip A. See Berger, Eric; et al., (82b:53074)
- Krantz, Steven G. (with Parks, Harold R.) Distance to C^k hypersurfaces. (82b:58005)
- Moore, John Douglas On conformal immersions of space forms. (82a:53081)
- Parks, Harold R. See Krantz, Steven G., (82b:58005)
- Rouxel, Bernard A -submanifolds in Euclidean space. (82g:53028)
- 53A10 Minimal surfaces, surfaces with prescribed mean curvature [See also 49F10, 53C42.]
- Abdulaev, R. N. Spherical transform of a surface of least area. (Russian) 82i:53005
- Beckenbach, Edwin F. The formulas of Weierstrass and the fundamental theorem of algebra for minimal surfaces. 82c:53009
- Beeson, Michael Some results on finiteness in Plateau's problem. I. 82g:53009
- Donato, S. A new characterization of the minimal surfaces of a Euclidean metric space. (Italian, English summary) 82d:53008
- Dziuk, Gerhard On the boundary behaviour of partially free minimal surfaces. 82b:53009
- Fornari, Susana A bound for total absolute curvature of surfaces in \mathbb{R}^3 . 82b:53008
- Gerhardt, Claus Evolutionary surfaces of prescribed mean curvature. 82m:53006
- Hasegawa, Takuichi The equation of a vibrating general membrane. 82c:53010
- Hoffman, David A. (with Osserman, Robert) The geometry of the generalized Gauss map. 82b:53012
- Jorge, Lagnésio Petrola de Melo (with Xavier, Frederico V.) On the existence of complete bounded minimal surfaces in \mathbb{R}^3 . 82c:53088
- Lê Dũng Tráng Surfaces minimales et singularités. 82f:53009
- Lewerenz, Frieder Eine Bemerkung zu den Marx-Schiffmannschen Minimalvektoren bei Polygonen. 82c:53006
- Meeks, William H., III The classification of complete minimal surfaces in \mathbb{R}^3 with total curvature greater than -8π . 82c:53009
- Uniqueness theorems for minimal surfaces. 82c:53012
- The topological uniqueness of minimal surfaces in three-dimensional Euclidean space. 82b:53010
- Morgan, Frank A smooth curve in \mathbb{R}^3 bounding a continuum of minimal manifolds. 82b:53013
- Ollershaw, Kathleen The minimum surface connecting the sides of a cubic frame. 82b:53014

Osseman, Robert Minimal surfaces, Gauss maps, total curvature, eigenvalue estimates, and stability. **82c:53013**

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Özok, Afet K. On related vector fields of capillary surfaces. **82g:53010**

Parks, Harold R. The Gauss map of a three-dimensional minimal surface. **82m:53007**

Rassias, Themistocles M. Global analysis of the Morse-Smale index for a minimal immersion in \mathbb{R}^n , $n \geq 3$ and its application to the classification problem of unstable minimal immersions. **82i:53007**

Rosca, Radu On the codimension n minimal surfaces carrying a covariant decomposable tangential vector field in a Riemannian or pseudo-Riemannian space form. **82h:53011**

Rouxel, Bernard Ruled θ -surfaces in Euclidean space E^n . **82j:53011**

Ruchert, Hartmut A uniqueness result for Enneper's minimal surface. **82h:53012**

Strömer, Gerhard Instabile Flächen vorgeschriebener mittlerer Krümmung. **82k:53010**

Tausch, Engelbert The n -dimensional least area problem for boundaries on a convex cone. **82c:53014**

Williams, Graham H. Surfaces of prescribed mean curvature with a volume constraint. **82c:53015**

Xavier, Frederico V. The Gauss map of a complete nonflat minimal surface cannot omit 7 points of the sphere. **82b:53015**

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Aumann, Günter Die Minimalhyperregelflächen. (English summary) **(82h:53007)**

Bazylev, V. T. On partial mappings of Euclidean spaces. (Russian. English summary) **(82j:53009)**

Chen, Jin Tzu On the existence of capillary free surfaces in the absence of gravity. **(82g:49037)**

Dierkes, Ulrich ★ Isoperimetrische Variationsprobleme. (German) [Isoperimetric variational problems] **(82m:58024)**

Galloway, Gregory J. Some results on the occurrence of compact minimal submanifolds. **(82k:53061)**

Gerhardt, Claus A free boundary value problem for capillary surfaces. **(82e:49065)**

Hildebrandt, Stefan (with Nitsche, Johannes C. C.) Optimal boundary regularity for minimal surfaces with a free boundary. **(82i:49040)**

Korevaar, Nicholas J. On the behavior of a capillary surface at a re-entrant corner. **(82c:49033)**

Lawson, H. Blaine, Jr. ★ Lectures on minimal submanifolds. Vol. I. **(82d:53035a)**

★ Lectures on minimal submanifolds. Vol. I. **(82d:53035b)**

Linkwitz, K. Least-squares methods as a tool to calculate and optimize the design of prestressed cable nets and hanging nets. **(82f:51002)**

Mori, Hiroshi Minimal surfaces of revolution in H^3 and their global stability. **(82k:53082)**

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Nagano, Tadashi (with Smyth, Brian) Minimal surfaces in tori by Weyl groups. II. **(82g:53063)**

Nitsche, Johannes C. C. See Hildebrandt, Stefan, **(82i:49040)**

Reissner, E. On finite pure bending of curved tubes. **(82g:73027)**

Schöffler, Karlheinz Stabilität mehrfach zusammenhängender Minimalflächen. (English summary) **(82e:49060)**

Shikata, Yoshihiro On a lower bound of the numbers of minimal surfaces. **(82h:58032)**

Smyth, Brian See Nagano, Tadashi, **(82g:53063)**

Wente, Henry C. Large solutions to the volume constrained Plateau problem. **(82a:49049)**

53A15 Affine differential geometry

Baiymbetova, T. A. Some geometric form of the manifold $E_7(0,1)$ in A_5 . (Russian) **82c:53016**

Barthel, Woldemar (with Volkmer, Reinhard; Haubitz, Imme) Thomsensche

Minimalflächen—analytisch und anschaulich. **82j:53010**

Beljakova, O. V. (with Hljapova, E. A.) On a class of cylindrical congruences of framed conics in A_5 . (Russian) **82m:53008**

Haubitz, Imme See Barthel, Woldemar; et al., **82f:53010**

Hljapova, E. A. See Beljakova, O. V., **82m:53008**

Isabekov, M. B. A theorem concerning an n -dimensional surface S_n in the $(n+2)$ -dimensional equiaffine space A_{n+2} . (Russian) **82f:53011**

Ivanov, G. I. On the distributions Δ_2 of parabolas. (Russian) **82k:53011**

Kretov, M. V. Complexes of central quadrics in affine space. (Russian) **82k:53012**

Navickis, K. V. Intrinsic framings of nonholonomic hypercomplexes in four-dimensional affine space. (Russian. Lithuanian and English summaries) **82a:53004**

Nesterenko, V. V. On the geometric origin of the equation $\varphi_{11} - \varphi_{22} = e^{\varphi} - e^{-\varphi}$. **82i:53008**

Platonova, V. I. Finite equations of some nonruled surfaces in a three-dimensional affine space. (Russian. English summary) **82j:53012**

Rimer, David La géométrie différentielle des complexes de quadriques dans l'espace equiaffine A_5 . **82d:53009**

Sopina, E. P. Congruences of ellipsoids with a developable surface of centers. (Russian) **82k:53013**

Stepanov, S. E. Realization of Čebyšev connection on a hypersurface of affine space. (Russian) **82j:53013**

Su, Bu Qing Some intrinsic invariants of a parametric curve in affine hyperspace. (Chinese summary) **82g:53011**

Tolstova, G. D. Relative and special submanifolds of a complex of conics. (Russian) **82g:53012**

Truppo, V. A. Affine geometry of the manifold $E(0, n-1, 2n-2)$ associated with a first-order partial differential equation. (Russian) **82c:53011**

The fundamental connection of the manifold $E(0, n-1, 2n-2)$. (Russian) **82c:53012**

Verbickaja, L. A. On a class of congruences of parabolas. (Russian) **82k:53014**

Volkmer, Reinhard See Barthel, Woldemar; et al., **82f:53010**

secondary classifications:

Britov, A. V. Bidistribution in A_n . (Russian) **(82m:53021)**

Čebyševa, B. P. Geometry of cylindrical families of planes in E_n^3 . (Russian) **(82c:53026)**

Gregorash, D. (with Papini, G.) Weyl-Dirac theory with torsion. (Italian and Russian summaries) **(82b:83067a)**

(with Papini, G.) Weyl-Dirac theory with torsion. II. Foundations and conservation equations. (Italian and Russian summaries) **(82b:83067b)**

Jusupov, D. Š. Density of a set of parabolas in equicentroaffine geometry. (Russian) **(82f:51020)**

Lorens, Michal Scalar differential concomitants of first order of a symmetric connexion Γ_{jk}^i in the two-dimensional space and their applications. **(82a:53019)**

Papini, G. See Gregorash, D., **(82b:83067a)** and **(82b:83067b)**

Podkovyrin, A. S. Theory of analytic surfaces of a biaffine space. II. (Russian) **(82c:53017)**

53A17 Kinematics

Baigunčev, Ž. Ž. See Džoldasbekov, U. A.; et al., **82b:53016**

Bloom, John R. (with Whitt, Lee) The geometry of rolling curves. **82h:53013**

Bottema, O. (with Veldkamp, G. R.) Zweigliedrige äquiforme ebene Bewegungen. **82h:53014**

Drábek, Karel Äquiforme Analogien zu einigen Geschwindigkeitseigenschaften der Kongruentbewegung der Ebene. **82h:53015**

Džoldasbekov, U. A. (with Baigunčev, Ž. Ž.; Rysbaev, B. R.) Analytic determination of circular quadratic points. (Russian) **82b:53016**

Haitin, A. A problem of the rolling of a body of arbitrary form from a smooth convex surface on a plane. (Russian. English summary) **82m:53009**

Karger, Adolf Similarity motions in E_3 with plane trajectories. (Czech summary) **82h:53016**

Muffter, V. G. Two-dimensional curve construction by the envelope method. **82k:53015**

Osipov, V. A. (with Osipova, L. I.) Theoretical fundamentals of the carcass-kinematic guiding line method. **82k:53016**

Osipova, L. I. See Osipov, V. A., **82k:53016**

Paulkowsitch, Hans Peter Die Schmiegekegelschnitte einer Klothoide. **82a:53005**

Pimenov, R. I. Finsler kinematics. (Russian) **82k:53017**

Ruas, Afrânio F. (with Tölke, Jürgen) Eine Kennzeichnung der symmetrischen Projektivbewegungen. **82d:53010**

Rysbaev, B. R. See Džoldasbekov, U. A.; et al., **82b:53016**

Tölke, Jürgen Zur Kinematik von ebenen Kurvenpaaren. **82f:53012**

See also Ruas, Afrânio F., **82d:53010** and de Vasconcelos, Elinalva V., **82f:53013**

de Vasconcelos, Elinalva V. (with Tölke, Jürgen) Eine Raumbewegung mit nur kubischen Bahnkurven. **82f:53013**

Veldkamp, G. R. See Bottema, O., **82h:53014**

Whitt, Lee See Bloom, John R., **82h:53013**

Wunderlich, Walter Zur projektiven Invarianz von Wackelstrukturen. (English and Russian summaries) **82h:53017**

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Baigunčev, Ž. Ž. (with Džoldasbekov, S. U.) Differential equations of motion of plane lever mechanisms of higher classes with several degrees of freedom. (Russian) **(82e:70003)**

Bolker, Ethan D. (with Roth, B.) When is a bipartite graph a rigid framework? **(82c:57003)**

Burns, Joseph A. Ball rolling on a turntable: analog for charged particle dynamics. **(82d:70011)**

Džoldasbekov, S. U. See Baigunčev, Ž. Ž., **(82e:70003)**

Fusco, Giorgio General determination of the M -independent positional functions. (Italian. English summary) **(82d:70028)**

Karger, Adolf Equiaffine Darboux motions with double roots. **(82c:51028)**

Krawietz, A. Natürliche Geometrie der Deformationsprozesse. **(82k:73004)**

Lobas, L. G. Nonholonomic system which models rolling of a tricycle along a plane. **(82g:70028)**

Markowsky, George (with Wesley, Michael A.) Fleshing out wire frames. **(82f:68035)**

Modugno, Marco On the structure of classical kinematics. II. Frames of reference. Observed kinematics. **(82m:70001b)**

Roth, B. (with Whiteley, Walter) Tensegrity frameworks. **(82m:51018)**

See also Bolker, Ethan D., **(82c:57003)**

Skidan, I. A. Quasihelical, cyclic and canal G -surfaces. (Russian) **(82c:53006)**

Tölke, Jürgen Eine kinematische Kennzeichnung der gleichseitigen Paraboloiden. (English summary) **(82k:51014)**

Eine Bemerkung zum gleichseitigen hyperbolischen Paraboloid als Bewegungsfläche bei Zylinderschrotungen. **(82a:51020)**

Wesley, Michael A. See Markowsky, George, **(82f:68035)**

Whiteley, Walter See Roth, B., **(82m:51018)**

Wunderlich, Walter Neue Wackelkosaeder. **(82d:51012)**

Žuravlev, V. F. Equations of motion of mechanical systems with ideal one-sided links. **(82g:70006)**

53A20 Projective differential geometry

Ahrarav, F. S. Normalized surfaces of the space of zero pairs. (Russian) **82f:53014**

Andreev, B. A. Distribution of line elements generated by the mapping $f: P_m \rightarrow A_n$ ($m > n$). (Russian) **82j:53014**

Some types of characteristic configuration of the mapping f . (Russian) **82k:53018**

Backes, Fernand Propriétés concernant les congruences W . **82a:53006**

Une famille de cercles \mathcal{P} provenant d'un système hypercyclique. **82j:53015**

Systèmes hypercycliques à cercles générateurs tangents. **82k:53019**

- Belomestnyh, L. A. A pair of curves in a five-dimensional projective space. (Russian) **82h:53017**
- Boldyreva, I. E. See Ivlev, E. T., **82a:53007**
- Borovec, G. M. Parametric equations of biaxially tangential complexes. (Ukrainian. English and Russian summaries) **82h:53020**
- Civinskaja, T. M. Metric properties of a mapping of a pair of congruences of lines of the space P_3 into the space S_3 . (Russian) **82g:53013**
See also Mašanov, V. I., **82g:53014**
- Degen, Wendelin Bemerkungen über parabolische Kegelschnittflächen. **82h:53018**
- Dulalaeva, T. A. On the geometry of a pair of surfaces in the projective space P_4 . (Russian) **82e:53017**
A pair of distributions in P_4 . (Russian) **82f:53015**
- Geidel'man, R. M. Surfaces carrying a net of lines of curvature. (Russian) **82d:53011**
- Gerbsommer, L. E. (with Krugljakov, L. Z.; Mizin, A. G.) Complexes of multidimensional planes. (Russian) **82h:53018**
- Gocajuk, S. V. An existence theorem for the nets Σ_n^p ($p < n$) in the space P_n . Correlations associated to the net Σ_n^{n-1} . (Russian) **82f:53016**
- Hudenko, V. N. On the geometry of manifolds of multidimensional quadrics. (Russian) **82i:53009**
- Ivanov, V. G. Generalized parallelism in a projective space. (Russian) **82h:53019**
- Ivlev, E. T. (with Boldyreva, I. E.) The h -family of pairs of lines in P_{m+2} ($h = m-1, m$). (Russian) **82a:53007**
- Korsakova, L. G. A class of stratifiable pairs of congruences of second-order curves in P_3 . (Russian) **82a:53018**
- Krugljakov, L. Z. (with Rybčenko, L. V.) 2-families of lines in P_4 . (Russian) **82a:53008**
(with Nikitina, E. S.; Norden, A. P.) Construction of some focal complexes of two-dimensional planes. (Russian) **82j:53016**
See also Gerbsommer, L. E.; et al., **82h:53018**
- Levina, R. P. A generalization of developable surfaces in multidimensional spaces. (Russian) **82e:53019**
- Malahovskaja, S. V. Congruences of ruled quadrics with a focal self-polar tetrahedron. (Russian) **82k:53021**
- Marcus, Froim Some remarks on nonruled surfaces whose asymptotes of both families belong to linear complexes. **82f:53017**
Some observations on surfaces with null-projective-curvature. **82j:53017**
- Mašanov, V. I. A pair of ruled surfaces in P_3 . (Russian) **82h:53020**
On the class and order of focalness of a family of planes. (Russian) **82h:53021**
(with Civinskaja, T. M.) Metric properties of a mapping of a pair of ruled surfaces into the space S_3 . (Russian) **82g:53014**
- Mekero, D. G. Geometric interpretation of the invariants of a two-parameter system of lines in a generalized biaxial space $P_3^{1,2}$. (Russian) **82k:53022**
- Miroškina, N. A. Congruences of two-dimensional planes that have two families of torsors, in the five-dimensional projective space P_5 . (Russian) **82d:53012**
Focal congruences of two-planes in the five-dimensional projective space P_5 . (Russian) **82g:53015**
- Mizin, A. G. See Gerbsommer, L. E.; et al., **82h:53018**
- Nikitina, E. S. See Krugljakov, L. Z.; et al., **82j:53016**
- Norden, A. P. See Krugljakov, L. Z.; et al., **82j:53016**
- Piccoletta, Lia Fioravanti Differential characterizations of some classes of algebraic varieties. (Italian. English summary) **82h:53019**
- Popov, Ju. I. On the invariant framing of a special class of decomposable hyperbands CH_m^n in a projective space. (Russian) **82m:53010**
- Read-Derchain, Colette Sur les grilles hyperboliques associées à des congruences non H' de droites. (English summary) **82f:53018**
- Rimer, David Congruences de cônes quadratiques tangents à la surface support. **82a:53009**
Compléments à l'étude différentielle des variétés de quadriques. (Romanian summary) **82e:53020**
- Rybčenko, L. V. See Krugljakov, L. Z., **82a:53008**
- Ševčenko, Ju. I. Generalized normalization of a tangentially framed surface. (Russian) **82k:53023**
- Vasil'jan, M. A. Projective differential geometry of one-parameter hyperbands. (Russian) **82e:53021**
- Žogova, T. B. Focal three-web of a two-parameter family of two-dimensional planes in P_3 . (Russian) **82a:53010**
- secondary classifications:
- Arcidiacono, Giuseppe On the "projective" magnetohydrodynamics. **(82a:83031)**
- Brazevič, M. V. On the question of inflectional centers in pairs of complexes. (Russian) **(82j:53018)**
- Čapenko, V. P. On the congruences $(P, Q)_{2,2}$ that are generated by a quadric and a point in three-dimensional projective space. (Russian) **(82j:53019)**
- Govorkov, A. V. See Skrydlova, E. V., **(82i:53013)**
- Morikawa, Hisasi Some analytic and geometric applications of the invariant theoretic method. **(82f:30049)**
- Nazarov, H. H. Classification of a quadruple of congruences in a three-dimensional projective space P_3 . (Russian) **(82h:53020)**
- Quine, J. R. Plücker equations for curves. **(82k:14052)**
- Sanini, Aristide Conformal and projective variations of a Riemannian metric. (Italian. English summary) **(82h:53057)**
- Skrydlova, E. V. (with Govorkov, A. V.) On a class of degenerate congruences that are generated by a quadric and a point. (Russian) **(82i:53013)**
- Tölke, Jürgen Zur Kinematik von ebenen Kurvenpaaren. **(82f:53012)**
- Žogova, T. B. On a class of two-parameter families of two-dimensional planes in P_3 with a hexagonal focal web. (Russian) **(82f:53026)**
- 53A25 Differential line geometry
- Abdel-All, N. H. See Soliman, M. A., **82j:53022**
- Abd-Elkader, O. M. See Soliman, M. A., **82d:53015**
- Atanasjan, S. L. (with Gur'eva, V. P.; Martakova, A. S.) Congruences of polarized parabolic lines of three-dimensional spaces with projective metrics. (Russian) **82e:53022**
- Baranova, V. A. (with Uzdénov, O. M.) Normal and binormal congruences of lines of three-dimensional non-Euclidean and Euclidean spaces. (Russian) **82e:53023**
- Brazevič, M. V. On the question of inflectional centers in pairs of complexes. (Russian) **82j:53018**
- Čapenko, V. P. On the congruences $(P, Q)_{2,2}$ that are generated by a quadric and a point in three-dimensional projective space. (Russian) **82j:53019**
- Funtikova, T. P. Degenerate congruences that are generated by a pair of lines. (Russian) **82h:53024**
- Govorkov, A. V. See Skrydlova, E. V., **82i:53013**
- Gur'eva, V. P. See Atanasjan, S. L.; et al., **82e:53022**
- Koch, Richard Zur Geometrie der zweiten Grundform der Geradenkongruenzen des E^3 . (English summary) [On the geometry of the second fundamental form of line congruences of E^3] **82j:53020**
- Kožuharova, R. See Mekero, D. G., **82g:53016**
- Lebedeva, G. A. Ruled surfaces in Sp_3 . (Russian) **82i:53010**
2-families of lines in Sp_3 . (Russian) **82j:53011**
Focal directions of a 3-surface described by the ray of a 2-family. Asymptotic directions. (Russian) **82i:53012**
- Martakova, A. S. See Atanasjan, S. L.; et al., **82e:53022**
- Meirer, Klaus Die windschiefen Flächen mit einer stetigen Schar ebener Schattengrenzen. I. (English summary) **82d:53013**
- Mekero, D. G. (with Kožuharova, R.) Hyperbolic and elliptic congruences of straight lines in degenerate biaxial space. (Bulgarian. Russian and German summaries) **82g:53016**
- Nazarov, H. H. Classification of a quadruple of congruences in a three-dimensional projective space P_3 . (Russian) **82h:53020**
- Nerjesjan, V. A. A class of permissible complexes of two-dimensional planes in \mathbb{R}^6 . (Russian. Armenian summary) **82e:53013**
- Plastinina, V. D. Geometric properties of congruences of projective t -normals. (Russian) **82d:53014**
- Pylarinos, Othon Sur une classe de congruences de normales associées aux fonctions harmoniques de deux variables. (Greek summary) **82m:53011**
- Redozubova, O. S. Θ -pairs of congruences with special location of focal surfaces. (Russian) **82g:53017**
- Semilov, A. S. Projective classification of two-parameter families of k -dimensional planes of multidimensional projective spaces. (Russian) **82j:53021**
- Skrydlova, E. V. (with Govorkov, A. V.) On a class of degenerate congruences that are generated by a quadric and a point. (Russian) **82i:53013**
- Soliman, M. A. (with Abd-Elkader, O. M.) Geometrical construction of particular kinds of complexes in Euclidean space E^3 . (Arabic summary) **82d:53015**
(with Abdel-All, N. H.) A new class of complexes of lines in elliptic space S_3 with one of the principal surfaces coincident with the coordinate surfaces. **82j:53022**
- Uzdénov, O. M. See Baranova, V. A., **82e:53023**
- Wunderlich, Walter Regelflächen festen Dralls mit konstant gedalltem Striktionsband. **82j:53023**
- secondary classifications:
- Aumann, Günter Die Minimalhyperregelflächen. (English summary) **(82h:53007)**
- Boldyreva, I. E. See Ivlev, E. T., **(82a:53007)**
- Civinskaja, T. M. Metric properties of a mapping of a pair of congruences of lines of the space P_3 into the space S_3 . (Russian) **(82g:53013)**
See also Mašanov, V. I., **(82g:53014)**
- Ivlev, E. T. (with Boldyreva, I. E.) The h -family of pairs of lines in P_{m+2} ($h = m-1, m$). (Russian) **(82a:53007)**
- Krugljakov, L. Z. (with Rybčenko, L. V.) 2-families of lines in P_4 . (Russian) **(82a:53008)**
- Mašanov, V. I. (with Civinskaja, T. M.) Metric properties of a mapping of a pair of ruled surfaces into the space S_3 . (Russian) **(82g:53014)**
- Meirer, Klaus Über windschiefe Flächen mit ausgezeichneten Scharen ebener Kurven. **(82j:53006)**
- Petkantić, Bojan L. Pairs of families of straight lines with a common moving tetrahedron in biaxial geometry. (Bulgarian. German summary) **(82a:53011)**
- Rybčenko, L. V. See Krugljakov, L. Z., **(82a:53008)**
- Weiß, Gunter Zur euklidischen Liniengeometrie. II. **(82d:51011)**
- 53A30 Conformal differential geometry
- Brauer, Heinrich Die erzeugendentreuen konformen Abbildungen aus Regelflächen. **82d:53016**
- Marin, Toma Sur l'algèbre tangente d'un espace à connexion conforme. **82e:53024**
- Pyž, V. M. Conformal deformations of Riemannian spaces and torsion. (Russian) **82m:53012**
- Schiemangk, Christina (with Sulanke, Rolf) Submanifolds of the Möbius space. **82d:53017**
- Sulanke, Rolf See Schiemangk, Christina, **82d:53017**
- Wolpert, Scott A generalization of the Ahlfors-Schwarz lemma. **82m:53013**
- Yamada, Toshiaki On conharmonic and concircular transformations. **82m:53014**
- secondary classifications:
- Ejiri, Norio A negative answer to a conjecture of conformal transformations of Riemannian manifolds. **(82e:53064)**
- Kyriakopoulos, E. Conformal invariance of Maxwell's equations with magnetic charges. **(82a:78006)**
- Sanini, Aristide Conformal and projective variations of a Riemannian metric. (Italian. English summary) **(82h:53057)**

53A35 Non-Euclidean differential geometry

- Borisov, A. V. Integral invariants of sets of points in a biplanar space of hyperbolic type. (Russian) **82i:53025**
- Čebyševa, B. P. Differential geometry of curves of the space E^3 . (Russian) **82i:53025**
- Geometry of cylindrical families of planes in E^3 . (Russian) **82i:53026**
- Dobčenko, V. A. Absolute mean integral curvature of a surface of revolution in three-dimensional Lobachevskii space. (Russian) **82i:53019**
- Kallenberg, G. W. Umbilics of quadrics in three-dimensional non-Euclidean geometry. **82i:53022**
- Mekero, D. G. Differential geometry of surfaces in a degenerate biaxial space. (Bulgarian. Russian and German summaries) **82g:53018**
- Two-parameter systems of lines in a generalized biaxial space. (Russian) **82i:53014**
- Petkanin, Bojan L. Pairs of families of straight lines with a common moving tetrahedron in biaxial geometry. (Bulgarian. German summary) **82i:53011**
- Portnoy, Esther Transitive groups of isometries on H^n . **82j:53024**
- Širokov, A. P. A model for the ruled geometry of Lobachevskii space. (Russian) **82i:53015**

secondary classifications:

- Balabanova, R. Lines in a pseudoisotropic space without metric. (Bulgarian. Russian and English summaries) **82i:53020**
- Eberlein, Patrick Geodesics and ends in certain surfaces without conjugate points. (82i:53070)
- Haagerup, Uffe (with Munkholm, Hans J.) Simplices of maximal volume in hyperbolic n -space. (82i:53116)
- Lapkovskii, V. K. Hyperconvergence of two-dimensional pseudo-Euclidean planes in a space of special relativity. (Russian) (82i:83006)
- Munkholm, Hans J. See Haagerup, Uffe, (82i:53116)

53A40 Other special differential geometries

- Balabanova, R. Lines in a pseudoisotropic space without metric. (Bulgarian. Russian and English summaries) **82i:53020**
- Benz, Walter Der Satz von Liouville über räumliche orthogonale treue (winkel treue) Abbildungen für beliebige Signatur. **82i:53026**
- Blank, Ja. P. (with Korolev, E. A.) Surfaces of an elliptic space that support an infinite set of translation nets. (Russian) **82i:53015**
- Klotina, G. V. Theory of curves in a quasibiflag space. (Russian) **82i:53027**
- Korolev, E. A. See Blank, Ja. P., **82i:53015**
- Otsuki, Tominosuke A family of 2-dimensional Riemannian manifolds joining the non-Euclidean planes. **82i:53016**
- Sachs, Hans Algebraische und analytische Methoden in der Theorie der Geradenkomplexe des Flaggenraumes. **82j:53025**
- Vasina, N. V. Theory of curves in an Appell space of parabolic type. (Russian) **82i:53027**

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- Cruceanu, V. La contribution de l'école de géométrie de Iași à l'étude des espaces non holonomes. (82i:01067e)
- Georgiev, Georgi Iv. (with Miron, Radu) À l'occasion du demi-centenaire de la géométrie des systèmes mécaniques non holonomes. (82i:01067a)
- The evolution of the idea of differential at the beginning of this century and the development of local and global analysis. (82i:01067g)
- Kožuharova, R. See Mekero, D. G., (82g:53016)
- Mekero, D. G. (with Kožuharova, R.) Hyperbolic and elliptic congruences of straight lines in degenerate biaxial space. (Bulgarian. Russian and German summaries) (82g:53016)
- Differential geometry of surfaces in a degenerate biaxial space. (Bulgarian. Russian and German summaries) (82g:53018)
- (Mihăilescu, Tiberiu) See Tarina, Marian, (82i:01067e)
- Miron, Radu See Georgiev, Georgi Iv., (82i:01067a)
- Pimenov, R. I. Finsler kinematics. (Russian) (82i:53017)
- Plebański, Jerzy F. See Przanowski, M., (82i:83028)
- Popescu, I. P. Recherches sur les variétés non holonomes à Timișoara. (82i:01067f)
- Przanowski, M. (with Plebański, Jerzy F.) Generalized Goldberg-Sachs theorems in complex and real space-times. II. (82i:83028)
- Stepański, T. A. Invariant metric and affine connection in manifolds of pairs of images of a simplicity. (Russian) (82i:51013)
- Tarina, Marian Les recherches du professeur Tiberiu Mihăilescu sur les variétés non holonomes de l'espace projectif. (82i:01067e)
- Teodorescu, Ion D. Réalisations de l'école de géométrie de Bucarest dans la théorie des espaces de Vranceanu. (82i:01067d)
- Vranceanu, Gheorghe Quelques considérations quasi historiques sur les espaces non holonomes. (82i:01067b)

53A45 Vector and tensor analysis

- Drašković, Zoran V. On invariance of integration in Euclidean space. **82j:53026**
- Jakubowicz, Antoni (with Lizak, Jadwiga; Szczepanek, Wojciech; Zandecka-Perl, Urszula) Application of a certain Diophantine equation to the construction of algebraical scalar concomitants of a given tensor field. **82i:53021**
- Lizak, Jadwiga See Jakubowicz, Antoni; et al., **82i:53021**
- Malzan, Jerry On symmetry classes of tensors. **82i:53022**
- Mosolov, B. G. Integral theorems of polyvector analysis. (Russian) **82i:53012**
- Stephenson, Rodney A. On the uniqueness of the square-root of a symmetric, positive-definite tensor. **82i:53028**
- Szczepanek, Wojciech See Jakubowicz, Antoni; et al., **82i:53021**
- Zandecka-Perl, Urszula See Jakubowicz, Antoni; et al., **82i:53021**

secondary classifications:

- Bieszk, Leon On the transitive fibres of a mixed tensor in the space X^3 . (82i:15020)
- Duggal, K. L. On Einstein-Maxwell field equations. (82i:83050)
- Galimov, K. Z. On the nonlinear theory of thin shells of Timoshenko's type. (Russian) (82i:73059)
- (with Nemcev, E. A.) Some mathematical aspects of the theory of shells. (Russian) (82i:73063a)
- (with Nemcev, E. A.) Some mathematical aspects of the theory of shells. II. (Russian) (82i:73063b)
- Hiramatsu, Hitosi Integral inequalities and their applications in Riemannian manifolds admitting a projective vector field. (82i:53053)
- Nemcev, E. A. See Galimov, K. Z., (82i:73063a) and (82i:73063b)
- Sobczyk, G. Conjugations and Hermitian operators in space time. (82i:15034)
- Vallon, M. T. Conformal tensor interactions. (Italian and Russian summaries) (82g:81042)
- Weinert, Ulrich Spherical tensor representation. (82i:22019)

53A50 Spinor analysis

- Beckers, J. (with Hussin, V.) Spinors and related tensors invariant under $E(3)$ and its subgroups. **82i:53023**
- Hussin, V. See Beckers, J., **82i:53023**

secondary classifications:

- Cormack, W. J. (with Hall, G. S.) Spinors, algebraic geometry, and the classification of second-order symmetric tensors in general relativity. (82i:83061)
- Hall, G. S. See Cormack, W. J., (82i:83061)
- Kerner, Richard Spinors on fibre bundles and their use in invariant models. (82i:53043)
- Sirlin, A. A class of useful identities involving correlated direct products of γ matrices. (82i:81031)

53A55 Differential invariants (local theory), geometric objects

- Atanasjan, S. L. Geometry of real curves of complex and dual spaces. (Russian) **82i:53021**
- Bieszk, Leon (with Stygar, Danuta) On the transitive fibres of tensors of second order in the two-dimensional space X^2 . **82i:53013**
- Grozman, P. Ja. Local invariant bilinear operators over tensor fields on the plane. (Russian. English summary) **82i:53029**
- Kirnickaja, È. F. See Vulpe, N. I., **82i:53033**
- Lubczonok, Grzegorz Differential concomitants of tensor fields. (Polish summary) **82i:53014**
- Stygar, Danuta Transitive fibres of the tensor t_{ij} in the three-dimensional space X^3 . **82i:53030**
- Transitive fibres of the antisymmetric tensor T_{ij}^k in the three-dimensional space X^3 . **82i:53019**
- See also Bieszk, Leon, **82i:53013**
- Vanstone, J. R. Tensor concomitants of order zero. **82i:53023**
- Vedernikov, V. I. A space of pseudoframes. (Russian) **82i:53015**
- Vujičić, V. Covariant differentiation of a scalar over a vector. (Serbo-Croatian) **82i:53031**
- Vulpe, N. I. Complete algebraic basis for centroaffine invariants of a homogeneous cubic differential system. (Russian) **82i:53032**
- (with Kirnickaja, È. F.) Centroaffine invariants of a differential system with cubic nonlinearities. (Russian) **82i:53033**

secondary classifications:

- Abd-Elkader, O. M. See Soliman, M. A., (82i:53015)
- Bularas, Driss Affine invariants of differential systems. (Russian) (82i:34013)
- Daniiljuk, V. I. (with Sibirskii, K. S.) Syzygies between centroaffine invariants of a quadratic differential system. (Russian) (82i:34005)
- Fokin, A. G. Statistical properties of inhomogeneous solid media: central moment functions of material characteristics. (82g:73007)
- Gavrilov, S. P. Local classification of nonsingular isotropic vector fields in the first approximation in special and general relativity. (Russian) (82i:83036)
- Kirillov, A. A. Infinite-dimensional groups, their representations, orbits, invariants. (82i:22022)
- Kuzakon', V. M. Invariants of a family of surfaces in Euclidean space. (Ukrainian. English and Russian summaries) (82i:53055)
- Marshall, Charles D. Lie derivatives in differentiable spaces. (82i:58005)
- Morikawa, Hisasi On differential invariants of holomorphic projective curves. (82i:14012)
- Neuman, František A generalization of Floquet theory. (Slovak and Russian summaries) (82i:34050)
- Osada, E. Deformations of geodesic networks in gravity-invariant and potential-invariant representations. (82i:86003)
- Sibirskii, K. S. Unitary invariants of differential systems. (Russian) (82i:34015)
- See also Daniiljuk, V. I., (82i:34005)
- Sobczyk, G. Plebański classification of the tensor of matter. (82i:83032)
- Soliman, M. A. (with Abd-Elkader, O. M.) Geometrical construction of particular kinds of complexes in Euclidean space E^3 . (Arabic summary) (82i:53015)
- Taku, V. D. Comitants of a three-dimensional differential system with quadratic nonlinearities. (Russian) (82i:34006)
- Vulpe, N. I. A polynomial basis of center-affine comitants of a differential system. (Russian) (82i:34039)

53A60 Geometry of webs [See also 14C21, 20N05.]

- Akivis, M. A. The integration of the structure equations of a Moufang three-web of

minimal dimension. (Russian) **82j:53027**

Webs and almost Grassmannian structures. (Russian) **82a:53016**

A class of three-webs that are determined by a triple of hypersurfaces. (Russian) **82c:53014**

Andikjan, M. A. Three-webs in a tangent bundle that is defined by the multidimensional surface of an affine space. (Russian) **82a:53028**

Apresjan, Ju. A. Three-webs of curves and hypersurfaces and families of diffeomorphisms of one-dimensional manifolds. (Russian) **82j:53022**

Arakeljan, G. S. Some classes of multidimensional three-webs for which the surface of one of the families belongs to the surfaces of another family. (Russian) **82m:53016**

Bazylev, V. T. (with Kuz'min, M. K.; Stoljarov, A. V.) Nets on manifolds. (Russian) **82a:53029**

Beauville, Arnaud. Géométrie des tissus [d'après S. S. Chern et P. A. Griffiths]. **82a:53017**

Careva, B. Conformal transformation of three-webs in a two-dimensional Weyl space. (Bulgarian. Russian and English summaries) **82h:53024**

Chern, Shiing Shen (with Griffiths, Phillip A.) Corrections and addenda to our paper: "Abel's theorem and webs" [Jahresber. Deutsch. Math.-Verein. **80** (1978), no. 1-2, 13-110; MR **80b:53008**]. **82a:53030**

See also Beauville, Arnaud, **82a:53017**

Goldberg, Vladislav On the theory of 4-webs of multidimensional surfaces on a differentiable manifold X_{2n} . (Russian) **82j:53023**

Griffiths, Phillip A. See Chern, Shiing Shen, **82a:53030** and Beauville, Arnaud, **82a:53017**

Indrupskaja, E. I. Nonholonomic three-webs of maximal rank. (Russian) **82j:53024**

Kovancov, A. N. Nets that are determined by nonlinear projection operators. (Russian) **82m:53017**

Kuz'min, M. K. See Bazylev, V. T.; et al., **82a:53029**

Lazareva, V. B. Three-webs formed by families of circles on the plane. (Russian) **82j:53025**

Mihalov, Ju. I. Classification of two-webs of the type $T_{m,n}^{m,n}$. (Russian) **82j:53028**

Nishimori, Toshiyuki Octahedral webs on closed manifolds. **82h:53025**

Özdeğer, Abdülkadir A hexagonal 6-web on a surface whose asymptotic lines form a rhombic net. (Turkish summary) **82j:53029**

Selehov, A. M. A class of three-webs. (Russian) **82a:53034**

Local algebras of a cyclical three-web. (Russian) **82a:53031**

Three-webs with a partially symmetric curvature tensor. (Russian) **82a:53032**

Stoljarov, A. V. See Bazylev, V. T.; et al., **82a:53029**

Timosenko, V. V. On the structure of a multidimensional three-web which is the real realization of a three-web over a commutative associative algebra. (Russian) **82m:53018**

Verba, E. I. Nonholonomic three-webs. (Russian) **82a:53018**

Zogova, T. B. On a class of two-parameter families of two-dimensional planes in P_3 with a hexagonal focal web. (Russian) **82j:53026**

secondary classifications:

Balabanova, R. A common equal-way net of two-dimensional Riemann spaces. (Bulgarian. Russian and English summaries) **82h:53032**

Levina, R. P. A generalization of developable surfaces in multidimensional spaces. (Russian) **82a:53019**

Zlatanov, Georgi Some invariant characterizations of two-dimensional Weyl and Riemann spaces. (Bulgarian. Russian and English summaries) **82j:53080**

Zogova, T. B. Focal three-web of a two-parameter family of two-dimensional planes in P_3 . (Russian) **82a:53010**

53A99 None of the above, but in this section

Szociński, Brunon The orientation of doubly pseudostochastic geometry. (Polish. Russian and English summaries) **82g:53020**

secondary classifications:

Šapiro, Ja. L. A quasigeodesic mapping. (Russian) **82h:53027**

53Bxx Local differential geometry

53B05 Linear and affine connections

Bokan, Neda C-holomorphically projective transformations in a normal almost contact manifold. **82a:53035**

Čakmazjan, A. V. Framed submanifolds of an affine space with plane normal affine connection. (Russian) **82j:53027**

Catto, Diego On a classification of symmetric connections in a metric manifold. **82a:53018**

Egiazarjan, K. M. Almost product manifolds with an affine connection. (Russian) **82j:53017**

Egorov, A. I. Spaces of linear elements of a truncated affine connection with a group of motions of maximal order. (Russian) **82a:53036**

Нагиров, А. Э.-А. ★Геометрия аффинной связности двух измерений. (Russian) [Geometry of an affine connection of two dimensions] **82h:53026**

Jafarov, Š. A. The trajectories of convergence of vector fields in the spaces A_n . (Russian) **82a:53015**

Kaigorodov, V. R. Metrizability of spaces of affine connection with recurrent curvature. (Russian) **82j:53028**

Koljan, V. V. On an involution of the directions of an autocomposition space. (Russian. Armenian summary) **82h:53027**

Krupka, Demeter A remark on algebraic identities for the covariant derivative of the curvature tensor. **82g:53021**

Leko, M. D. Parametric equations of geodesics of a two-dimensional space in which geodesics are represented by a linear equation. **82a:53016**

Mocanu, Petru T. (with Teodorescu, Ion D.) Sur les variétés différentiables à caractéristiques droites. **82a:53033**

Nadj, Djerdi F. On curvatures of the Weyl-Otsuki spaces. **82m:53019**

Podkovyrin, A. S. Theory of analytic surfaces of a biaffine space. II. (Russian) **82a:53017**

Schattner, Ruprecht (with Trümper, Manfred) World vectors, Jacobi vectors and Jacobi one-forms on a manifold with a linear symmetric connection. **82j:53030**

Šurygin, V. V. Generalization of a theorem. (Russian) **82a:53018**

Teodorescu, Ion D. See Mocanu, Petru T., **82a:53033**

Trümper, Manfred See Schattner, Ruprecht, **82j:53030**

Veličkin, V. N. Connections that are induced by framings of the surface $V_{n-2} \subset E_n$. (Russian) **82a:53029**

secondary classifications:

Akivis, M. A. ★Многомерная дифференциальная геометрия. (Russian) [Multidimensional differential geometry] **82a:53001**

Čebyševa, B. P. See Mašanov, V. I., **82c:15029**

Kobayashi, Shoshichi On holomorphic connections. **82m:32022**

Martin, Quetglas, G. On the local geometry of differentiable manifolds with degenerate metric. (Spanish. English summary) **82h:53044**

Mašanov, V. I. (with Čebyševa, B. P.) The group of motions of a space with a degenerate metric. (Russian) **82c:15029**

Prikarpatskii, A. K. The geometric structure and Bäcklund transforms of nonlinear evolutionary equations that have a Lax representation. (Russian. English summary) **82a:58007**

Prvanović, Mileva Holomorphically semisymmetric connexions. (Serbo-Croatian summary) **82j:53031**

Seino, Masaru Some considerations on various curvature tensors. **82g:53031**

Truppov, V. A. Affine geometry of the manifold $E(0, n-1, 2n-2)$ associated with a first-order partial differential equation. (Russian) **82a:53011**

The fundamental connection of the manifold $E(0, n-1, 2n-2)$. (Russian) **82c:53012**

53B10 Projective connections

Ianuș, Stere On generalized Tîrjeica connections. (Romanian. English summary) **82m:53020**

Kobayashi, Shoshichi Projective structures of hyperbolic type. **82h:53028** (with Sasaki, Takeshi) Projective structures with trivial intrinsic pseudodistance. **82h:53029**

Muhamedov, A. M. Maximally moving gravitational fields with respect to almost projective motions that preserve the quadratic complex of geodesics. (Russian) **82g:53022**

Sasaki, Takeshi See Kobayashi, Shoshichi, **82h:53029**

secondary classifications:

Kobayashi, Shoshichi On holomorphic connections. **82m:32022**

Muhamedov, A. M. Almost projective mappings of gravitational fields. (Russian) **82f:83013**

Wu, Hung Hsi Some theorems on projective hyperbolicity. **82j:53061**

53B15 Other connections

Britov, A. V. Bidistribution in A_n . (Russian) **82m:53021**

Kamysanskii, N. R. Classification of the complete, simply connected subprojective pseudo-Riemannian spaces of V. F. Kagan. (Russian) **82h:53030**

Lorens, Michal Scalar differential concomitants of first order of a symmetric connexion Γ_{ij}^k in the two-dimensional space and their applications. **82a:53019**

Mishra, Ratan Shanker See Pal, R. B., **82f:53030**

Nicolescu, Liviu On the semisymmetric metric connection. **82j:53031**

Pal, R. B. (with Mishra, Ratan Shanker) Hypersurfaces of Riemannian manifold with quarter-symmetric metric connection. **82f:53030**

Rybnikov, A. K. Second-order affine connections. (Russian) **82h:53031**

Teodorescu, Ion D. Sur la connexion presque-projective d'une variété différentiable. **82g:53023**

secondary classifications:

Careva, B. Conformal transformation of three-webs in a two-dimensional Weyl space. (Bulgarian. Russian and English summaries) **82h:53024**

Freedman, Daniel Z. (with Townsend, Paul) Antisymmetric tensor gauge theories and nonlinear σ -models. **82b:81133**

Fusco, Giorgio General determination of the M -independent positional functions. (Italian. English summary) **82d:70028**

Gunning, R. C. ★On uniformization of complex manifolds: the role of connections. **82c:32034**

Ishikawa, Hirohisa Correspondence between geodesics in a tangent bundle and spinning particles. **82a:83046**

Marin, Toma Sur l'algèbre tangente d'un espace à connexion conforme. **82a:53024**

Šurygin, V. V. A generalization of flat connections in spaces over algebras. (Russian) **82j:53060**

Townsend, Paul See Freedman, Daniel Z., **82b:81133**

53B20 Local Riemannian geometry

Abakirov, B. Riemannian spaces with a maximum number of fields of degeneracy with respect to certain groups of motions. (Russian) **82a:53034**

Adati, Tsyuzi (with Miyazawa, Teturo) An almost paracontact Riemannian manifold with a structure of the concircular type. **82h:53024**

Aminova, A. V. (with Muhamedov, A. M.) Groups of almost projective motions of

- n -dimensional (pseudo) Euclidean spaces. (Russian) **82k:53035**
- Balabanova, R.** A common equal-way net of two-dimensional Riemann spaces. (Bulgarian. Russian and English summaries) **82k:53032**
- Benenti, Sergio** (with Francaviglia, Mauro) Canonical forms for separability structures with less than five Killing tensors. **82k:53025**
- Boju, V.** (with Popescu, Mariana; Virtan, I.) Espaces Chern-Vranceanu qui admettent deux feuilletages à courbure presque constante. **82c:53018**
- Dekrét, Anton** On quasi-Riemannian fiber manifold. **82k:53036**
- Dicu, Constantina** Properties of the pseudo-Riemannian manifold $(TM, G = g^C - g^{D^*} - g^V)$ constructed over the Riemannian manifold (M, g) . II. (Romanian. English summary) **82m:53023**
- (with Udriște, Constantin) Properties of the pseudo-Riemannian manifold $(TM, G = g^C - g^{D^*} - g^V)$, constructed over the Riemannian manifold (M, g) . **82m:53022**
- Enghis, P.** Relations entre des espaces riemanniens à tenseurs récurrents. (Romanian summary) **82a:53020**
- Farran, Hani** G -structures on manifolds with parallel foliations. (Arabic summary) **82f:53031**
- Francaviglia, Mauro** See **Benenti, Sergio**, **82b:53025**
- Grifone, Joseph** (with Lamrini, Fayçal) Fibrés de torsion associés à une immersion et étude des sous-variétés dont l'indice de nullité relative est constant. (English summary) [Torsion bundles associated with an immersion and study of the submanifolds whose relative nullity is constant] **82m:53024**
- Grycak, W.** Null geodesic collineations in conformally recurrent manifolds. **82c:53037**
- Hainzl, Josef** Neue Aspekte der Separationsmethode. **82j:53032**
- Hasegawa, Izumi** Sasakian manifolds with η -parallel contact Bochner curvature tensor. **82k:53037**
- Ishikawa, Susumu** On Riemannian metrics of tangent bundles of order 2 of Riemannian manifolds. **82g:53024**
- Kalnins, E. G.** (with Miller, Willard, Jr.) Separable coordinates for three-dimensional complex Riemannian spaces. **82c:53038**
- (with Miller, Willard, Jr.) Killing tensors and nonorthogonal variable separation for Hamilton-Jacobi equations. **82j:53033**
- Kamysanskii, N. R.** (with Solodovnikov, A. S.) Semireducible analytic spaces "in the large". (Russian) **82c:53019**
- Kanemaki, Shōji** On submanifolds of codimension 2 of almost contact metric manifolds. II. **82a:53021**
- Karanda, Hussein M.** Recurrent and birecurrent Einstein spaces. **82d:53027**
- Kazdan, Jerry L.** Another proof of Bianchi's identity in Riemannian geometry. **82b:53026**
- Kim, Hae Yang** On conformal Killing tensor fields in a locally decomposable Riemannian space with boundary. (Korean. English summary) **82c:53039**
- Koljan, V. V.** A two-dimensional surface of an autocomposition space. (Russian) **82c:53040**
- Lamrini, Fayçal** See **Grifone, Joseph**, **82m:53024**
- Miller, Willard, Jr.** See **Kalnins, E. G.**, **82c:53038** and **82j:53033**
- Miyazawa, Teturo** See **Adati, Tyuzi**, **82b:53024**
- Moldobaev, D.I.** Three-dimensional Riemannian spaces with intransitive four-parameter groups of conformal transformations with a subgroup of homotheties. (Russian) **82f:53032**
- Muhamedov, A. M.** See **Aminova, A. V.**, **82k:53035**
- Necitailova, L. S.** Groups of motions of an n -orthogonal system of the space V_n into itself. (Russian) **82a:53022**
- Infinitesimal transformations of n -orthogonal systems in a Riemannian space. (Russian. Georgian and English summaries) **82g:53025**
- Infinitesimal transformations of n -orthogonal systems in a Riemannian V_n . (Russian) **82c:53041**
- Nătescu, Cătălina** On birecurrent tensors in Riemannian spaces. (Romanian summary) **82c:53020**
- Recurrent properties of concircular related spaces. **82b:53034**
- Riemannian spaces with A -recurrent vector field. (Romanian summary) **82a:53023**
- On Z -birecurrent spaces. (Romanian summary) **82b:53033**
- Nivas, Ram** See **Upadhyay, M. D.**, **82a:53025**
- Podolskii, V. G.** Spaces (V_n, g^*) ($n=3,4$) admitting fibre-exchanging transformation in (TV_n, g^*) . (Russian) **82j:53034**
- Popescu, Mariana** See **Boju, V.** et al., **82c:53018**
- Saakjan, S. S.** Hemispheres of a complex plane and their real realization. (Russian) **82j:53035**
- Šapiro, Ja. L.** A quasigeodesic mapping. (Russian) **82b:53027**
- Šlosarska, Wanda** On a certain property of the Ricci-recurrent space. **82a:53024**
- Solodovnikov, A. S.** See **Kamysanskii, N. R.**, **82c:53019**
- Udriște, Constantin** See **Dicu, Constantina**, **82m:53022**
- Upadhyay, M. D.** (with Nivas, Ram) On some special nullity spaces. (Spanish summary) **82a:53025**
- Vanhecke, Lieven** A note on harmonic spaces. **82m:53025**
- Verma, Manjula** Auto-parallelism and union Gaussian curvature in Riemannian space. **82k:53038**
- Virtan, I.** See **Boju, V.** et al., **82c:53018**
- Walter, R.** Konvexität in riemannschen Mannigfaltigkeiten. **82c:53021**
- Wang, Yuan Da** On some properties of Riemannian spaces of quasicontant curvature. **82j:53036**
- secondary classifications:
- Abe, Shingo** The gravitational and electromagnetic fields in the space-time X_4 . I. **(82b:83066)**
- Derdzinski, Andrzej** (with Roter, W.) Some properties of conformally symmetric manifolds which are not Ricci-recurrent. **(82b:53060)**
- On conformally symmetric Ricci-recurrent manifolds with abelian fundamental groups. **(82b:53061)**
- Do Šm'ar'** On the Gauss principle and the motion equations of controlled mechanical systems. **(82g:70056)**

- Duarte de Oliveira, J.** See **Novello, M.**, **(82b:83031)**
- Fomin, V. E.** On the geodesic mapping of infinite-dimensional Riemannian spaces into symmetric spaces with an affine connection. (Russian) **(82g:58009)**
- Gogala, Borut** Torsion and related concepts: an introductory overview. **(82i:83065a)**
- Halford, W. D.** See **McIntosh, C. B. G.**, **(82i:83053)**
- Lubczonok, Grzegorz** Differential concomitants of tensor fields. (Polish summary) **(82a:53014)**
- Martinenko, Marija** Fundamental solutions of elliptic systems in Riemannian space. (Ukrainian. Russian summary) **(82a:53039)**
- McIntosh, C. B. G.** (with Halford, W. D.) Determination of the metric tensor from components of the Riemann tensor. **(82i:83053)**
- Mihova-Nehmer, V. M.** On the generalized S -curvature-like tensor field on an almost contact manifold. **(82f:53051)**
- Miller, Willard, Jr.** (with Patera, J.; Winternitz, P.) Subgroups of Lie groups and separation of variables. **(82h:81055)**
- Monroe, David K.** Local transverse-traceless tensor operators in general relativity. **(82k:83038)**
- Nadi, Djerdji F.** On curvatures of the Weyl-Otsuki spaces. **(82m:53019)**
- Novello, M.** (with Duarte de Oliveira, J.) On dual properties of the Weyl tensor. **(82b:83031)**
- Patera, J.** See **Miller, Willard, Jr.** et al., **(82h:81055)**
- Roter, W.** See **Derdzinski, Andrzej**, **(82b:53060)**
- Rumjancev, V. V.** On the Lagrange and Jacobi principles for nonholonomic systems. **(82m:49061)**
- Schattnner, Ruprecht** (with Trümper, Manfred) World vectors, Jacobi vectors and Jacobi one-forms on a manifold with a linear symmetric connection. **(82j:53030)**
- Spindel, P.** Yano vector fields and conformally related spaces. **(82c:83019)**
- Taub, A. H.** Generalised Kerr-Schild space-times. **(82i:83015)**
- Trümper, Manfred** See **Schattnner, Ruprecht**, **(82j:53030)**
- Winternitz, P.** See **Miller, Willard, Jr.** et al., **(82h:81055)**
- Xu, Bo Wei** The maximal kinematical group of the general Schrödinger equation. **(82j:81019)**

53B21 Methods of Riemannian geometry

- Fukui, Masaki** (with Iwai, Noritsugu; Ogasawara, Kaori; Kizu, Kazuhiro; Hashizume, Kozi; Mikuni, Tetsuro) On the U -tensor in Riemannian spaces. **82g:53026**
- Gray, Alfred** (with Vanhecke, Lieven) Power series expansions, differential geometry of geodesic spheres and tubes, and mean-value theorems. **82b:53028**
- Hashizume, Kozi** See **Fukui, Masaki** et al., **82g:53026**
- Iwai, Noritsugu** See **Fukui, Masaki** et al., **82g:53026**
- Kizu, Kazuhiro** See **Fukui, Masaki** et al., **82g:53026**
- Mikuni, Tetsuro** See **Fukui, Masaki** et al., **82g:53026**
- Ogasawara, Kaori** See **Fukui, Masaki** et al., **82g:53026**
- Vanhecke, Lieven** See **Gray, Alfred**, **82b:53028**
- Zund, Joseph** The projective geometry of the Weyl spinor. **82b:53035**

secondary classifications:

- Arutjunjan, S. H.** The geometry of a symmetric space of pairs of points of n -dimensional conformal space. (Russian. Armenian summary) **(82d:53029)**
- Burikin, O. Ja.** (with Selez'ova, F. G.) Mixed problems for some equations in a Riemannian space that are well-posed in the sense of I. G. Petrovskii. (Russian) **(82m:35022)**
- Hiramatu, Hitosi** Riemannian manifolds admitting a projective vector field. **(82d:53026)**
- Roščupkin, L. D.** A generalized form of Čaplygin-Voronoev-type equations. (Russian. English summary) **(82h:93043)**
- Selez'ova, F. G.** See **Burikin, O. Ja.**, **(82m:35022)**

53B25 Local submanifolds [See also 53C40.]

- Bahadur, Neera** (with Prakash, Nirmala) Sphere as a hypersurface of π -almost contact manifold. **82i:53019**
- Bejancu, Aurel** Normal CR-submanifolds of a Kaehler manifold. **82a:53026**
- Chen, Bang-yen** (with Verstraeten, Leopold) Hypersurfaces of symmetric spaces. **82b:53029**
- Dajczer, Marcos** (with Rodriguez, Lucio) On asymptotic directions of minimal immersions. **82f:53033**
- He, Zi Fan** A generalization of the notion of totally geodesic surfaces in Riemannian spaces. (Chinese) **82c:53022**
- Kon, Masahiro** See **Yano, Kentaro**, **82j:53037**
- Maia, M. D.** Contacts of space-times. **82g:53027**
- Özdeğer, Abdülkadir** Some functions of direction in a subspace of a Riemannian space. (Turkish summary) **82i:53020**
- Prakash, Nirmala** See **Bahadur, Neera**, **82i:53019**
- Rizza, Giovanni Battista** On the complex differentials $\partial\bar{\partial}$, $\bar{\partial}\bar{\partial}$, $\bar{\partial}\bar{\partial}$. (Italian summary) **82i:53021**
- Rodriguez, Lucio** See **Dajczer, Marcos**, **82f:53033**
- Rouxel, Bernard** A -submanifolds in Euclidean space. **82g:53028**
- Sokuseva, M. R.** On a mapping of two-dimensional surfaces. (Russian) **82h:53036**
- Verstraeten, Leopold** See **Chen, Bang-yen**, **82b:53029**
- Yano, Kentaro** (with Kon, Masahiro) Infinitesimal variations of submanifolds of a Kaehlerian manifold. **82j:53037**

secondary classifications:

- Arca, Giuseppe** Surfaces hyperboliques ayant la propriété géodésique. (Italian summary) **(82c:53042)**
- Barbašov, B. M.** (with Nesterenko, V. V.) Relativistic string model in a space-time of a constant curvature. **(82c:83045)**

- Chen, Bang-yen Classification of totally umbilical submanifolds in symmetric spaces. (82d:53031)
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- Yamaguchi, Tadashi See Goto, Midori S.; et al., (82m:53041)
- Yang, Chung Tao Odd-dimensional widersehen manifolds are spheres. (82g:53049)
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- Cherrier, Pascal Problèmes de Neumann non linéaires sur les variétés riemanniennes. (English summary) (82f:58082)
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- Egiazarian, K. M. Projected invariant affine connections. (Russian) (82j:53054)
- Frankel, Theodore (with Galloway, Gregory J.) Energy density and spatial curvature in general relativity. (82g:83015)
- Galloway, Gregory J. See Frankel, Theodore, (82g:83015)
- Gilkey, Peter B. The spectral geometry of the higher order Laplacian. (82b:58097)
- Gray, Alfred (with Vanhecke, Lieven) Power series expansions, differential geometry of geodesic spheres and tubes, and mean-value theorems. (82b:53028)
- (with Vanhecke, Lieven) The area of geodesic discs in surfaces. (Dutch. English summary) (82b:53058)
- Grozman, P. Ja. Local invariant bilinear operators over tensor fields on the plane. (Russian. English summary) (82e:53029)
- Hasanis, Thomas Characterization of totally umbilical hypersurfaces. (82e:53079)
- Jimenez Alcon, F. See Echarte Reula, F. J., (82b:22011)
- Jost, Jürgen ★ Eineindeutigkeit harmonischer Abbildungen. (German) [Uniqueness of harmonic mappings] (82k:58036)
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- Kikuchi, Norio On the nonlinear parabolic equation of Eells-Sampson and a harmonic mapping with boundary condition. (82e:58025)
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- Kora, Mitsuru On conformal Killing forms and the proper space of Δ for p -forms. (82b:58099)
- Krivov, V. V. On the extremal differential form for generalized modulus. (Russian) (82i:58002)
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- de Miatello, Isabel Dotti See Leite, Maria Luiza, (82b:22013)
- Niculescu, Liviu On the semisymmetric metric connection. (82j:53031)
- Otsuki, Tominosuke A family of 2-dimensional Riemannian manifolds joining the non-Euclidean planes. (82i:53016)
- Petridis, Nicholas C. Distance and volume decreasing theorems for quasiconformal mappings. (82j:32055)
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Regge, Tullio Mathematics and physics. (See 82a:83002)

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Krisch, J. P. On the Killing surface-event horizon relation. (82i:83021)

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Gromoll, Detlef (with **Grove, Karsten**) On metrics on S^2 all of whose geodesics are closed. (82m:58021)

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Klingenberg, Wilhelm Closed geodesics. (82a:58021)

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Makarova, K. P. Points of self-intersection of a geodesic on a smooth closed surface with locally Lobačevskii metric. (Russian) (82c:53100)

Platonova, O. A. Singularities in the problem of the fastest passage of an obstruction. (Russian) (82i:58022)

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- Yamaguchi, Seichi (with Ikawa, Toshihiko) Totally real and C-totally real submanifolds of positive curvature operator. (82j:53099)
- Yau, Shing Tung See Cheng, Shiu Yuen, (82f:53074)

53C30 Homogeneous manifolds [See also 14M15, 14M17, 32M10, 57T15.]

- Al-Aqeel, Adnan Riemannian 5-regular manifolds as coset manifolds. (82c:53069)
- Boothby, William M. On compact homogeneous contact manifolds. (82a:53052)
- De Cecco, Giuseppe Lie algebra and holomorphic p -sectional curvatures of a complex homogeneous space. (Italian. English summary) (82i:53059)
- Ernotte, P. Commutation properties of 2-parameter groups of isometries. (82b:53066)
- Fijašer, A. Reductive structures and Lie triple systems. (Russian. Estonian and English summaries) (82c:53072)
- Gorbacevič, V. V. Almost homogeneous spaces. (Russian) (82b:53067)
- On the structure of compact homogeneous spaces. (Russian) (82a:53053)
- Compact homogeneous manifolds of small dimension. (Russian) (82j:53081)
- Compact homogeneous spaces with a semisimple fundamental group. (Russian) (82c:53067)
- Topological structure of compact homogeneous spaces with a solvable fundamental group. (Russian) (82j:53082)
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- Greuc, Eltimie Symmetric spaces associated with the pseudo-orthogonal groups. (Romanian. French summary) (82j:53083)
- Gromov, N. A. ★Предельные переходы в пространствах постоянной кривизны. (Russian) [Limit transitions in spaces of constant curvature] (82j:53084)
- Jacob, John Phillip Geodesic symmetries of homogeneous Kähler manifolds. (82f:53060)
- Kikkawa, Michihiko On homogeneous systems. II. (82j:53085)
- On homogeneous systems. III. (82j:53086)
- Kimelfeld, B. N. Reductive groups that are locally transitive on quadrics. (Russian) (82c:53032)
- Homogeneous domains on real quadrics. (Russian) (82c:53073)
- Reductive groups that are locally transitive on the flag manifolds of the orthogonal groups. (Russian. English summary) (82c:53074)
- Kolesova, T. I. Homogeneous spaces with a small number of irreducible components of a group of rotations. (Russian) (82c:53075)
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- Marmazeev, V. I. On a class of submanifolds in reductive homogeneous spaces. (Russian) (82m:53049)
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- (Milnor, John) See Uesu, Kagumi, (82m:53050)
- Oniščik, A. L. Transitive actions on Borel manifolds. (Russian) (82c:53033)
- Sakai, Takashi Cut loci of Berger's spheres. (82g:53054)
- Shima, Hirohiko Homogeneous Hessian manifolds. (82a:53054)
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- Sugahara, Kumio On the diameter of compact homogeneous Riemannian manifolds. (82c:53034)
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- Uesu, Kagumi A note on: "Curvatures of left invariant metrics on Lie groups" [Adv. in Math. 21 (1976), no. 3, 293–329; MR 54 #12970] by J. Milnor. (82m:53050)
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- Kimura, Yoshio On the nullities of Kähler C -spaces in $P_n(C)$. (82a:53063)
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- Schneider, Rolf A local formula of translative integral geometry. (82j:53119)
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- Taniguchi, Yoshiharu Normal homogeneous metrics and their spectra. (82j:58103)

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- Atsuyama, Kenji Symmetric spaces derived from algebras. (82j:53088)
- Bouten, Franciska (with Verstraeten, Leopold) Recurrent hypersurfaces of symmetric spaces. (82c:53070)
- Greuc, Eltimie Variétés de Grassmann non compactes. (82c:53068)
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- Hsiang, Wu Yi See Hsiang, Wu Teh, (82j:53089)
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- Koiso, Norihito Rigidity and stability of Einstein metrics—the case of compact symmetric spaces. (82a:53055)
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- Classification of locally symmetric spaces which admit a totally umbilical hypersurface. (82j:53096)
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- Fijašer, A. Reductive structures and Lie triple systems. (Russian. Estonian and English summaries) (82c:53072)
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- Satake, Ichirō ★Algebraic structures of symmetric domains. (82i:32003)
- Sato, Takuji The spectrum of the Laplacian for some 6-dimensional K -spaces. (82g:58092)
- Sbitneva, L. V. Perfect s -structures. (Russian) (82j:53059)
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- Tsuji, Tadashi A characterization of homogeneous self-dual cones. (82i:32060)
- Verstraeten, Leopold See Chen, Bang-yen, (82b:53029)

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- Abe, Kinetsu Some remarks on a class of submanifolds in space forms of nonnegative curvature. (82a:53056)
- Aminov, Ju. A. Grassmann transform of a two-dimensional surface in four-dimensional Euclidean space. (Russian) (82j:53093)
- Arutjunjan, S. H. The geometry of a symmetric space of pairs of points of n -dimensional conformal space. (Russian. Armenian summary) (82d:53029)
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- Blinz, E. The notion of torsion and second fundamental tensor revisited. **82i:53063**
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- Zidarov, D. P. Determination of the earth's figure by solving the inverse astrogeological problem—uniqueness. (**82g:86010**)
- Current problems in mathematics ★Современные проблемы математики. Том 16. (Russian) [Current problems in mathematics. Vol. 16] (**82d:81003**)
- Itogi Nauki i Tehniki ★Современные проблемы математики. Том 16. (Russian) [Current problems in mathematics. Vol. 16] (**82d:81003**)
- 53C70 Direct methods (G -spaces of Busemann, etc.)
- Alexander, Ralph Planes for which the lines are the shortest paths between points. (**82d:53042**)
- Berestovskii, V. N. Spaces with bounded curvature. (Russian) **82k:53093**
- Busemann, H. (with Phadke, B. B.) Locally Desarguesian spaces. **82a:53068**
- (with Phadke, B. B.) Two theorems on general symmetric spaces. **82f:53079**
- Gandini Zucco, Andreana Sur une conjecture de B. Grünbaum concernant les familles continues de courbes. (Italian summary) **82c:53104**
- Grochulski, J. (with Konik, T.; Tkacz, M.) On the tangency of sets in metric spaces. (**82h:53084**)
- Konik, T. See Grochulski, J.; et al., **82h:53084**
- Phadke, B. B. See Busemann, H., **82a:53068** and **82f:53079**
- Tkacz, M. See Grochulski, J.; et al., **82h:53084**
- secondary classifications:
- Burnat, M. Supersonic nozzles without shocks. (Polish and Russian summaries) (**82m:76040**)
- Goto, Midori S. The cone topology on a manifold without focal points. (**82d:53024**)
- Meyerson, Mark D. Equilateral triangles and continuous curves. (**82m:57004**)
- 53C75 Geometric orders, order geometry [See also 51Lxx.]
- secondary classifications:
- Bisztriczky, Tibor (with Rival, Ivan) Continuous, slope-preserving maps of simple closed curves. (**82b:51022**)
- Rival, Ivan See Bisztriczky, Tibor, (**82b:51022**)
- Rubinstein, G. Š. (with Rutkovskii, N. V.) Axial structures and foundations of geometry. (Russian) (**82f:51014**)
- Rutkovskii, N. V. See Rubinstein, G. Š., (**82f:51014**)
- 53C80 Applications to physics
- Chern, Shiing Shen Geometry and physics. **82j:53121**
- Kerner, Richard Spinors on fibre bundles and their use in invariant models. **82d:53043**
- Sohnius, Martin F. The conformal group in superspace. **82a:53069**
- secondary classifications:
- Ahsan, Zafar On the Goldberg-Sachs theorem in general relativity. (**82c:83021**)
- Alvarez-Gaumé, Luis (with Freedman, Daniel Z.) The background field method and the ultraviolet structure of the supersymmetric nonlinear σ -model. (**82h:81107**)
- Ansari, A. A. See Lal, K. B., (**82c:83057**)
- Assad, M. J. D. See Soares, I. Damiao, (**82c:83024**)
- Atanasiu, George (with Sofonea, Liviu) Propriétés systématiques des G -structures et quelques interprétations physiques. (**82h:81042**)
- Baekler, Peter A spherically symmetric vacuum solution of the quadratic Poincaré gauge field theory of gravitation with Newtonian and confinement potentials. (**82c:83054**)
- Belinskii, V. A. (with Fargion, D.) The inverse scattering method in the theory of gravitation. (Italian. English summary) (**82m:83032**)

- Bonora, L. (with Pasti, P.; Tonin, M.) Geometric description of extended BRS symmetry in superfield formulation. (Italian and Russian summaries) (82j:81057)
- Bruschi, Massimo Example of a gauge transformation which cannot be continuously lifted to the Lie algebra. (82d:81073)
- Burzlaff, J. Non-self-dual solutions of SU(3) Yang-Mills theory and a two-dimensional abelian Higgs model. (82g:81076)
- Chamseddine, Ali H. Interacting supergravity in ten dimensions: the role of the six-index gauge field. (82m:83052)
- Chern, Shiing Shen Geometry and physics. (82i:00025)
- Chimahi, Donatus Some geometrical properties of Chou space-time. (82i:83031)
- Coll, Bartolomé (with Moreno, Carlos) Sur une classe d'observateurs synchronisés attachée au laplacien d'espace-temps. (English summary) (82b:83051)
- Dautcourt, G. Isotropic hypersurfaces in general relativity admitting groups of motions. (82d:83028)
- Demaret, Jacques Bouncing quantum cosmologies. (82g:83031)
- D'Emma, G. C. On quantization of the electromagnetic field. (82b:81129)
- Dinariev, O. Ju. Spherically symmetric solutions of Yang-Mills-Einstein equations. (Russian) (82b:81055)
- Ernst, Frederick J. See Hauser, Isidore. (82b:83030)
- Fargion, D. See Belinskii, V. A. (82m:83032)
- Frank, V. A. (with Novozilov, Ju. V.; Prohvatilov, E. V.) On the light-cone formulation of classical nonabelian gauge theory. (82i:81111)
- Freedman, Daniel Z. See Alvarez-Gaumé, Luis. (82b:81107)
- Friedman, John L. (with Sorkin, Rafael D.) A spin-statistics theorem for composites containing both electric and magnetic charges. (82b:81089)
- Giachetti, Riccardo (with Ricci, Riccardo; Sorace, Emanuele) Tetrad fields and metric tensor in the gauge theory of gravitation. (82g:83020)
- Gott, J. Richard, III Chaotic cosmologies and the topology of the universe. (82a:83058)
- Gowdy, Robert H. The wave equation in asymptotically retarded time coordinates: waves as simple, regular functions on a compact manifold. (82g:83025)
- Gu, Chao Hao On the structure of classical Yang-Mills fields. (82g:81054)
- Gupta, Manmohan (with Sharma, Avinash) Connection between Yang-Mills configurations in Minkowski and Euclidean spaces. (82d:81080)
- Hájček, P. Quantum wormholes. I. Choice of the classical solution. (82f:83045)
- Hauser, Isidore (with Ernst, Frederick J.) Proof of a Geroch conjecture. (82b:83030)
- Hawking, Stephen W. Theoretical advances in general relativity. (See 82d:83002)
- Herlitz, E. See Kramer, Dietrich; et al., (82b:83002)
- Hoyos, J. See Quirós, M.; et al., (82m:81057)
- Isenberg, James A. (with Nester, James M.) Canonical gravity. (82e:83001)
- Isham, C. J. Space-time topology and spontaneous symmetry breaking. (82m:81039)
- Jackiw, R. (with Manton, N. S.) Symmetries and conservation laws in gauge theories. (82d:81103)
- Jaffe, Arthur (with Taubes, Clifford Henry) ★Vortices and monopoles. (82m:81051)
- Kalinowski, M. W. Gauge fields with torsion. (82m:83049)
- Katkar, L. N. On the Nijenhuis tensor in relativistic electrodynamics. (Italian and Russian summaries) (82m:83024)
- Kiskis, Joe Hamiltonian formulation of the SU(2) gauge field in interaction with an external source. (82a:81022)
- Korjakin, V. M. Laws of conservation on manifolds of class C^∞ . (Russian) (82b:83053)
- Kramer, Dietrich (with Stephani, H.; Herlitz, E.; MacCallum, M.) ★Exact solutions of Einstein's field equations. (82b:83002)
- Kyriakopoulos, E. Axially symmetric solutions of Einstein equations. (82i:83020)
- Lake, Kayll Local inhomogeneities in a Robertson-Walker background. I. General framework. (82b:83079)
- Lal, K. B. (with Ansari, A. A.) On wave solutions of weakened field equations in a $V_2 \times V_3$ space-time. (Turkish summary) (82c:83057)
- Luehr, C. P. See Rosenbaum, M. (82f:83092)
- MacCallum, M. See Kramer, Dietrich; et al., (82b:83002)
- Manton, N. S. See Jackiw, R. (82d:81103)
- Mashkour, Munaim A. Quantization of angular momentum in curved space-time. I. Tensor fields. (82g:83011)
- Mazón, M. L. See Quirós, M.; et al., (82m:81057)
- Mielke, Eckehard W. On pseudoparticle solutions in Yang's theory of gravity. (82i:83061)
- Moncrief, Vincent Infinite-dimensional family of vacuum cosmological models with Taub-NUT (Newman-Unti-Tamburino)-type extensions. (82b:83024)
- Moreno, Carlos See Coll, Bartolomé. (82b:83051)
- Nester, James M. See Isenberg, James A. (82e:83001)
- Newman, Ezra T. Self-dual gauge fields. (82c:81090)
- Novozilov, Ju. V. See Frank, V. A.; et al., (82i:81111)
- Ogievetskii, V. I. (with Sokačev, E. S.) The normal gauge in supergravity. (82f:83090)
- (with Sokačev, E. S.) Torsion and curvature in terms of the axial superfield. (82f:83091)
- Pasti, P. See Bonora, L.; et al., (82j:81057)
- Prasad, Gunraj (with Sinha, Bipin Behari) Cordes magnétiques (électriques) en magnétohydrodynamique relativiste. (English summary) (82a:76097)
- Prohvatilov, E. V. See Frank, V. A.; et al., (82i:81111)
- Pyž, V. M. The geometric approach to the problem of strong interactions. I. Strong gravitation. (Russian) (82f:81079a)
- The geometric approach to the problem of strong interactions. II. Conformal invariance. (Russian) (82f:81079b)
- Quirós, M. (with de Urries, F. J.; Hoyos, J.; Mazón, M. L.; Rodríguez, E.) Geometrical structure of Faddeev-Popov fields and invariance properties of gauge theories. (82m:81057)
- Ricci, Riccardo See Giachetti, Riccardo; et al., (82g:83020)
- Rodriguez, E. See Quirós, M.; et al., (82m:81057)
- Rosenbaum, M. (with Luehr, C. P.) Poincaré group theory of gravitation in the fiber-bundle picture. (82f:83092)
- Ross, Dennis K. Fiber bundles, superspace, and the gravitational field. (82j:83066a)
- Gauge groups in a fiber bundle approach to superspace and the gravitational field. (82j:83066b)

- Rosso, Fabio Bundle and proper incompleteness with unbounded world acceleration in general relativity. (Italian summary) (82b:83051)
- (Schmutzer, Ernst) See Kramer, Dietrich; et al., (82b:83002)
- Sharma, Avinash See Gupta, Manmohan. (82d:81080)
- Sinha, Bipin Behari See Prasad, Gunraj. (82a:76097)
- Soares, I. Damão (with Assad, M. J. D.) Anisotropic Bianchi VIII/IX cosmological models with matter and electromagnetic fields. (82c:83024)
- Solonea, Liviu See Atanasiu, Gheorghe. (82b:81042)
- Sokačev, E. S. See Ogievetskii, V. I. (82f:83090) and (82f:83091)
- Sorace, Emanuele See Giachetti, Riccardo; et al., (82g:83020)
- Sorkin, Rafael D. See Friedman, John L., (82b:81089)
- Steingrad, Z. A. Evolution of classical scalar and vector fields in spaces with Killing vectors. (Russian) (82b:83033)
- Stephani, H. See Kramer, Dietrich; et al., (82b:83002)
- Taubes, Clifford Henry See Jaffe, Arthur. (82m:81051)
- Tonin, M. See Bonora, L.; et al., (82j:81057)
- Trautman, Andrzej Fiber bundles, gauge fields, and gravitation. (82f:83080)
- Radiation of energy and change in color of a point source of the Yang-Mills field. (82d:81114)
- Tucker, R. W. Affine transformations and the geometry of superspace. (82d:83066)
- de Urries, F. J. See Quirós, M.; et al., (82m:81057)
- Vallander, S. S. Statistical mechanics of e -continuous models. I. Definition and ground states. (Russian. English summary) (82i:82013)
- Vinet, Luc Some invariant solutions to the Yang-Mills equations in the presence of scalar fields in Minkowski space. (82a:81026)
- Wellner, Marcel Manifest gauge and Poincaré covariance. (82m:78009)
- von Westenholz, C. On spontaneous symmetry breakdown and the Higgs mechanism. (82c:81067)
- Witten, Edward Search for a realistic Kaluza-Klein theory. (82j:83062)

53C99 None of the above, but in this section

- Efremovič, V. A. See Vainstein, A. G.; et al., 82h:53085
- Gorelik, E. M. See Vainstein, A. G.; et al., 82h:53085
- Liang, Chao Chu Infinitesimal isometries on compact manifolds. 82h:53089
- Rahula, M. O. Lie differentiation on manifolds. (Russian) 82h:53094
- Uhovskii, M. R. Commutativity of finite-dimensional subalgebras of Lie algebras of vector fields that are solenoidal in a two-dimensional domain and tangent to its boundary. (Russian) 82h:53090
- Vainstein, A. G. (with Gorelik, E. M.; Efremovič, V. A.) On metric foliations. (Russian) 82h:53085

secondary classifications:

- Bálint, Vojtech Solution of some second-order partial differential equations with a boundary condition. (Slovak) (82e:35012)
- Božek, Miloš Existence of generalized symmetric Riemannian spaces with solvable isometry groups. (Czech summary) (82c:53059)
- Burago, Ju. D. (with Zalgaller, V. A.) ★Геометрические неравенства. (Russian) [Geometric inequalities] (82d:52009)
- Dmitruk, A. V. A Jacobi-type condition for the nonnegativity of a quadratic form on a finitely-faced cone. (Russian) (82m:49030)
- Kaigorodov, V. R. (with Korjakin, V. M.) Lie groups induced by linear homogeneous geometric objects of class C^∞ . (Russian) (82c:22016)
- Korjakin, V. M. See Kaigorodov, V. R., (82c:22016)
- Palais, Richard S. A topological Gauss-Bonnet theorem. (82b:58002)
- Zalgaller, V. A. See Burago, Ju. D., (82d:52009)
- Zhang, Li Ning Super Killing equation and supersymmetry transformation. (Chinese. English summary) (82f:83094)

54-XX GENERAL TOPOLOGY {For the topology of manifolds of all dimensions, see 57Nxx.}

54-01 Elementary exposition, textbooks

- Engelking, Ryszard (with Sieklucki, Karol) ★Geometria i topologia. Część II. (Polish) [Geometry and topology. Part II] 82i:54001
- See also Kuratowski, Kazimierz, 82a:54001
- Gładysz, Stanisław ★Wstęp do topologii. (Polish) [Introduction to topology] 82g:54001
- Jäger, Joachim ★Elementare Topologie. (German) [Elementary topology] 82j:54001
- Kuratowski, Kazimierz ★Wstęp do teorii mnogości i topologii. (Polish) [Introduction to set theory and topology] 82a:54001
- Sieklucki, Karol See Engelking, Ryszard, 82i:54001
- Šostak, A. P. (with Zandere, M. K.) ★Topologijas elementi. I. (Latvian) [Elements of topology. I] 82g:54002
- Vestergaard, P. D. What is topology? An example. (Danish. English summary) 82i:54002
- Zandere, M. K. See Šostak, A. P., 82g:54002

secondary classifications:

- Doneddu, Alfred ★Topologie. (French) [Topology] (82m:26001)
- Egle, Kuno ★Elemente der Funktionalanalysis. (German) [Elements of functional analysis] (82c:46001)
- Erwe, Friedhelm ★Reelle Analysis. (German) [Real analysis] (82g:26002)
- Herget, Charles J. See Michel, Anthony N., (82i:00003)
- (Lepa, Eugene) See Maurin, Krzysztof, (82i:00003)
- Leffner, Günter ★Elemente der Topologie und Graphentheorie. (German) [Elements of topology and graph theory] (82c:05001)
- Maurin, Krzysztof ★Analysis. Part II. (82i:00003)

- Michel, Anthony N. (with Herget, Charles J.) ★Mathematical foundations in engineering and science. (82h:00003)
 Prijatelj, Niko ★Uvod v matematično analizo. 1. Del. (Slovenian) [Introduction to mathematical analysis. Part 1] (82h:26001)

54-02 Advanced exposition (research surveys, monographs, etc.)

- Hager, Anthony W. Cozero fields. 82g:54003
 Juhász, István ★Cardinal functions in topology—ten years later. 82a:54002

54-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Aleksandrov, P. S. Pages from an autobiography. (Russian) (82f:01071a)
 Pages from an autobiography. (Russian) (82f:01071b)
 Some moments in the development of the Moscow school of general topology in the last half century. (Russian) (82a:01066)
 See also Arboleda, L. C., (82h:01039)
 Arboleda, L. C. Origins of the Soviet school of topology. Remarks about the letters of P. S. Aleksandrov and P. S. Uryson to Maurice Fréchet. (Russian) (82h:01039)
 Bonarski, Andrzej The theories of Professor Borsuk. (Portuguese) (82f:01080)
 (Borsuk, Karol) See Bonarski, Andrzej, (82f:01080)
 (Cantor, Georg) See Medvedev, F. A., (82h:01035a) and Markušević, A. I., (82h:01035b)
 Duda, Roman The origins of the concept of dimension. (82a:01025)
 (Fréchet, Maurice) See Arboleda, L. C., (82h:01039)
 Markušević, A. I. Remarks on the paper: "Cantor's theory of real numbers" [Istor.-Mat. Issled. No. 23 (1978), 56-70; MR 82h:01035a] by F. A. Medvedev. (Russian) (82h:01035b)
 Medvedev, F. A. Cantor's theory of real numbers. (Russian) (82h:01035a)
 See also Markušević, A. I., (82h:01035b) and Arboleda, L. C., (82h:01039)
 Pier, Jean-Paul Historique de la notion de compacité. (English and German summaries) (82f:01068)
 (Uryson, P. S.) See Arboleda, L. C., (82h:01039)
 Biography:
 Aleksandrov, P. S. See Aleksandrov, P. S., (82f:01071a) and (82f:01071b)

54-04 Explicit machine computation and programs (not the theory of computation or programming)

54-06 Proceedings, conferences, etc.

- (Bennett, Harold R.) See Topology and order structures. 82h:54001
 Cochran, Allan C. Bibliography: convergence spaces (Limesräume). II. 82d:54001
 (Jones, F. Burton) See General topology and modern analysis. 82e:54001
 (Kliś, Czesław) See Proceedings: Conference on Convergence. 82h:54001
 (Kuperberg, Włodzimierz) See Proceedings: Topology Conference. 82f:54002
 (Lutzer, David J.) See Topology and order structures. 82h:54001
 (McAuley, Louis F.) See General topology and modern analysis. 82e:54001
 (Osmatetskii, P. K.) See Symposium: Tiraspol, General Topology and its Applications. 82h:54001
 (Rao, M. M.) See General topology and modern analysis. 82e:54001
 (Reed, G. M.) See Proceedings: Topology Conference. 82f:54002
 (Zenor, Phillip) See Proceedings: Topology Conference. 82f:54002
 Analysis ★General topology and modern analysis. 82e:54001
 Bibliography:
 Convergence spaces See Cochran, Allan C., 82d:54001
 Birmingham, Ala. ★The Proceedings of the 1980 Topology Conference. 82f:54002
 Conference:
 Convergence ★Proceedings of the Conference on Convergence. 82h:54001
 General Topology and Modern Analysis ★General topology and modern analysis. 82e:54001
 Topology ★The Proceedings of the 1980 Topology Conference. 82f:54002
 General topology and modern analysis ★General topology and modern analysis. 82e:54001
 Lubbock, Tex. ★Topology and order structures. Part I. 82h:54001
 Meeting:
 General Topology ★Proceedings of the Meeting on General Topology. 82f:54001
 Proceedings:
 Conference on Convergence ★Proceedings of the Conference on Convergence. 82h:54001
 Meeting on General Topology ★Proceedings of the Meeting on General Topology. 82f:54001
 Topology Conference ★The Proceedings of the 1980 Topology Conference. 82f:54002
 Riverside, Calif. ★General topology and modern analysis. 82e:54001
 Symposium:
 Tiraspol, General Topology and its Applications ★IV Тираспольский Симпозиум по Общей Топологии и ее Приложениям. (Russian) [Fourth Tiraspol Symposium on General Topology and its Applications] 82h:54001
 Szezyrk ★Proceedings of the Conference on Convergence. 82h:54001
 Tiraspol ★IV Тираспольский Симпозиум по Общей Топологии и ее Приложениям. (Russian) [Fourth Tiraspol Symposium on General Topology and its Applications] 82h:54001
 Topology ★IV Тираспольский Симпозиум по Общей Топологии и ее Приложениям. (Russian) [Fourth Tiraspol Symposium on General Topology and its Applications] 82h:54001
 ★General topology and modern analysis. 82e:54001

★Proceedings of the Meeting on General Topology. 82f:54001

★The Proceedings of the 1980 Topology Conference. 82f:54002

Topology and order structures ★Topology and order structures. Part I. 82h:54001

Trieste ★Proceedings of the Meeting on General Topology. 82f:54001

Workshop:

Topology and Linear Orderings ★Topology and order structures. Part I. 82h:54001

secondary classifications:

- (Fadell, Edward) See Fixed point theory. (82m:55002)
 (Fournier, Gilles) See Fixed point theory. (82m:55002)
 (Gähler, Siegfried) See Convergence structures and applications to analysis. (82d:46001)
 (Gähler, Werner) See Convergence structures and applications to analysis. (82d:46001)
 (Kneis, Gert) See Convergence structures and applications to analysis. (82d:46001)
 (Mardešić, Sibe) See Shape theory and geometric topology. (82m:55003)
 (Segal, Jack) See Shape theory and geometric topology. (82m:55003)
 Conference:
 Fixed Point Theory ★Fixed point theory. (82m:55002)
 Shape Theory and Geometry Topology ★Shape theory and geometric topology. (82m:55003)
 Convergence structures and applications to analysis ★Convergence structures and applications to analysis. (82d:46001)
 Dubrovnik ★Shape theory and geometric topology. (82m:55003)
 Fixed point theory ★Fixed point theory. (82m:55002)
 Frankfurt a.d. Oder ★Convergence structures and applications to analysis. (82d:46001)
 Shape theory and geometric topology ★Shape theory and geometric topology. (82m:55003)
 Sherbrooke, Que. ★Fixed point theory. (82m:55002)
 Summer School:
 Convergence Structures and Applications to Analysis ★Convergence structures and applications to analysis. (82d:46001)

54Axx Generalities

54A05 Topological spaces and generalizations (closure spaces, etc.)

- Cammaroto, Filippo Filters with a regular open (sub)-base or a regular closed (sub)-base. (Italian. English summary) 82h:54002
 Frit, Roman (with Kent, Darrell C.) On c -embedded sequential convergence spaces. 82e:54002
 Griseisen, G. Remarks on the limit inferior of a filtered set-family. 82f:54003
 Jakel, D. See Rajagopalan, M.; et al., 82i:54004
 Kašuba, R. The generalized Ocan topology on sets of subsets and topological Boolean rings. 82j:54002
 Kent, Darrell C. See Frit, Roman. 82e:54002
 Kim, Ki Hang (with Roush, Fred William) Posets and finite topologies. 82f:54004
 Mamuzić, Zlatko P. Some remarks on abstract distance in general topology. 82i:54003
 Ossejan, S. G. Pseudotopological spaces and their extensions. (Russian) 82e:54003
 Rădulescu, Florin On the frontier operator. 82d:54002
 Rajagopalan, M. (with Soundararajan, T.; Jakel, D.) On perfect images of ordinals. 82f:54004
 Riecke, C. V. Properties of complements in the lattice of convergence structures. 82a:54003
 Roush, Fred William See Kim, Ki Hang. 82f:54004
 Soltan, V. P. On Kuratowski's problem. (Russian. English summary) 82m:54001
 Soundararajan, T. See Rajagopalan, M.; et al., 82i:54004

secondary classifications:

- Charatonik, Janusz J. On chaotic curves. (82h:54048)
 Činčura, Juraj Reflective and coreflective subcategories of some category of generalized topological spaces. (Slovak and Russian summaries) (82f:18003)
 Dimov, G. (with Doičinov, Doičin) Supertopological spaces and locally compact extensions of topological spaces. (82e:54027)
 Doičinov, Doičin See Dimov, G., (82e:54027)
 Dorsett, Charles Semiseparation axioms and hyperspaces. (82g:54016)
 Hamburg, I. (with Hamburg, P.) Espaces quotient représentables. (82f:54012)
 Hamburg, P. See Hamburg, I., (82f:54012)
 Lefner, Günter ★Elemente der Topologie und Graphentheorie. (German) [Elements of topology and graph theory] (82h:05001)

54A10 Change of topology, comparison of topologies

- Chae, Gyu Ihn See Maheshwari, S. N.; et al., 82j:54003
 Ho, Chung Wu On the topologies of \mathbb{R}^n . 82e:54004
 Hristov, V. Z. On the topology induced by the Carathéodory metric. 82h:54002
 Khan, M. F. On intersections of subspace topologies. 82a:54004
 Maheshwari, S. N. (with Chae, Gyu Ihn; Thakur, S. S.) On α -convergent filters. (Korean summary) 82j:54003
 Thakur, S. S. See Maheshwari, S. N.; et al., 82j:54003

secondary classifications:

- Junnla, Heikki J. K. On σ -spaces and pseudometrizable spaces. (82a:54056)
 van Mill, Jan (with Mills, Charles F.) A boojum and other snarks. (82h:54066)
 Mills, Charles F. See van Mill, Jan, (82h:54066)
 Neumann-Lara, Victor Autonomous subsets of topological spaces. (82k:54026)
 Reynolds, Donald F. (with Schleusner, John W.) A note on the equiweak topology. (82i:54032)
 Rodionov, V. I. A relation in finite topologies. (Russian) (82k:54062)
 Schleusner, John W. See Reynolds, Donald F., (82i:54032)

54A15 Syntopogeneous structures

- Császár, Ákos Normality is productive. **82i:54005**
(with Matolcsy, Kálmán) Syntopogenous extensions for prescribed topologies. **82i:54006**

Matolcsy, Kálmán On extensions of syntopogenous spaces. **82i:54007**
See also Császár, Ákos, **82i:54006**

- Petz, Dénes On box products of syntopogenous spaces. **82j:54004**
Precup, Radu Le théorème des contractions dans des espaces syntopogènes. **82i:54008**

secondary classifications:

- Neubrunnová, Anna On transfinite convergence and generalized continuity. (Russian summary) **82m:54005**

54A20 Convergence (general theory) and limits

- Ambrožko, Edward Bounded sequences and some pseudotopologies. **82g:54004**
Butzmann, H.-P. Duality theory for abelian convergence groups. **82b:54003**
Chung, Woon Kyung On some properties of clusters in K_0 -proximity spaces. (Korean summary) **82f:54005**
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 Tymchatyn, E. D. See Grispolakis, Joachim, (82b:54049) and Oversteegen, Lex G., (82b:54058)

Wattel, Evert See van Mill, Jan, (82i:54038)

54B25 Sums, inverse limits

- Marjanović, M. M. Inverse limit sequences of graphs in representation of compact metric spaces. 82i:54024
 Stone, A. H. Erratum: "Inverse limits of compact spaces" [General Topology Appl. 10 (1979), no. 2, 203-211; MR 80m:54014]. 82a:54018

secondary classifications:

- Aoki, Yasushi Orthocompactness of inverse limits and products. (82j:54030)
 Eda, Katsuya Limit systems and chain condition. (82k:06018)
 Ivanov, A. V. Zero-dimensional prototypes of bicompa with a first axiom of countability. (Russian) (82d:54027)
 Lindström, Mikael A note on uniform convergence spaces. (82k:54046)
 54B30 Categorical methods [See also 18B30.]
 Calude, C. (with Malitz, M.) On the category of Čech topological spaces. 82e:54012
 Fedorčuk, V. V. Covariant functors in a category of compacta, absolute retracts and Q -manifolds. (Russian) 82j:54013
 Giuli, Eraldo Bases of topological epi-reflections. 82b:54016
 Topological epi-reflections and co-reflections. A characterization. (See 82f:54001)
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 Wischniewsky, Manfred B. A lifting theorem for right adjoints. 82i:54025
 Woods, R. Grant Epireflective subcategories of Hausdorff categories. 82j:54014
 Wyler, Oswald Function spaces in topological categories. 82m:54004

secondary classifications:

- Börger, Reinhard (with Tholen, Walter) Remarks on topologically algebraic functors. (82j:18008)
 Cerruti, Umberto The Stone-Čech compactification in the category of fuzzy topological spaces. (82i:54018)
 Činčura, Juraj Reflective and coreflective subcategories of some category of generalized topological spaces. (Slovak and Russian summaries) (82f:18003)
 Diers, Yves Some spectra relative to functors. (82j:18004)
 Herrlich, Horst (with Strecker, George E.) Semi-universal maps and universal initial completions. (82b:18004)
 Johanson, Arnold A. Topology without points. (82j:54009)
 Kawahara, Yasuo (with Minami, Toshiro) On the categories of complete Heyting algebras and topological spaces. (82i:06013)
 Lowen, Robert Fuzzy uniform spaces. (82k:54007)
 Melton, Austin Which dispersed diafactorization structures on Top are hereditary? (82g:54023)
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 Nakagawa, Ryosuke Separation axioms and classes of morphisms in TOP. (82b:54031)
 Petz, Dénes The class of compact spaces. (Hungarian) (82j:54036)
 A characterization of the class of compact Hausdorff spaces. (82b:54031)
 On (E, k) -compact spaces. (82f:54037)
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 Vainio, Reino Local connectedness in Cauchy space theory. (82c:54024)

54B35 Spectra

- Zaicev, V. I. Projective spectra and extensions of topological spaces. (Russian) 82i:54026

secondary classifications:

- Štěpín, E. V. Functors and uncountable degrees of compacta. (Russian) (82k:54012)

54B40 Presheaves and sheaves [See also 18F20.]

- Borceux, Francis Topologies sur un topos de faisceaux. (English summary) 82e:54013
 Pechanec-Dražoš, Jaroslav Functional separation of inductive limits and representation of presheaves by sections. IV. Representations of presheaves by sections. 82d:54009
 Equivalences in presheaves, functional separation of their inductive limits and representation by sections. (Russian summary) 82b:54019

secondary classifications:

- Balogun, Bola O. Abelian sheaves over topological spaces. (82d:18011)
 Grayson, R. J. Concepts of general topology in constructive mathematics and in sheaves. (82g:03105)
 Harting, Roswitha A remark on injectivity of sheaves of abelian groups. (82j:20101)

54B99 None of the above, but in this section

- Bankston, Paul Topological reduced products via good ultrafilters. 82g:54017
 Koldunov, A. V. See Zaharov, V. K., 82g:54018
 Zaharov, V. K. (with Koldunov, A. V.) Sequential absolute and its characterization. (Russian) 82g:54018

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- Arya, Shashi Prabha. See Singal, M. K., (82c:54033)
 Baber, Stephen A. (with Boone, James R.) A note on infinite sequential order. (82c:54044)
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 Ho, Chung Wu. On the topologies of \mathbb{R}^n . (82c:54004)
 Kannan, V. (with Rajagopalan, M.) Constructions and applications of rigid spaces. II. (82c:54045b)
 Ostaszewski, Adam J. Monotone normality and G_δ -diagonals in the class of inductively generated spaces. (82g:54033)
 Rajagopalan, M. See Kannan, V., (82c:54045b)
 Singal, M. K. (with Arya, Shashi Prabha) Weak topology sum theorems. (82c:54033)
 Tiller, John. Augmented compact spaces and continuous lattices. (82m:06008)

54Cxx Maps and general types of spaces defined by maps

secondary classifications:

- (Geoghegan, Ross) See Problems: Infinite-dimensional topology, (82a:57015)
 Problems:
 Infinite-dimensional topology. Open problems in infinite-dimensional topology. (82a:57015)

54C05 Continuous maps

- Baskirov, A. I. There is no universal separable Fréchet or sequential compact space. (82c:54009)
 Buck, R. Creighton. Dispersion mapping theorems. (82c:54027)
 Christensen, Jens Peter Reus. Joint continuity of separately continuous functions. (82c:54012)
 Kawashima, Genkichi. Sur la permutation et le rotation des matrices orthogonales. (82c:54013)
 Levy, Ronnie. Nonextendability of bounded continuous functions. (82f:54016)
 Noiri, Takashi. On δ -continuous functions. (82b:54020)
 Piotrowski, Zbigniew. Separate almost continuity and joint continuity. (82a:54020)
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 Šaprovskii, B. E. Special types of embeddings in Tychonoff cubes. Subspaces of Σ -products and cardinal invariants. (82d:54010)
 Srivastava, Pramila. See Prakash, Anand, (82g:54019)

secondary classifications:

- Charatonik, Janusz J. Some recent results and problems in continua theory. (82c:54038)
 Dickman, R. F., Jr. (with Porter, J. R.; Rubin, L. R.) Completely regular absolutes and projective objects. (82k:54061)
 Filippov, V. V. On the existence of solutions of differential equations. (82c:34005)
 Hueber, Hermann. On uniform continuity and compactness in metric spaces. (82k:54045)
 Lewis, Wayne. Homogeneous treelike continua. (82f:54054)
 Porter, J. R. See Dickman, R. F., Jr.; et al., (82k:54061)
 Rubin, L. R. See Dickman, R. F., Jr.; et al., (82k:54061)
 Treybig, L. B. Separation by finite sets in connected, continuous images of ordered compacta. (82a:54063)

54C08 Connectivity maps, semicontinuous maps, etc.

- Dolecki, Szymon (with Lechicki, Alojzy) Semi-continuité supérieure forte et filtres adhérents. (English summary) [Strong upper semicontinuity and adherent filters] (82c:54015)
 Kohli, J. K. s -continuous functions and certain weak forms of regularity and complete regularity. (82f:54017)
 Lane, Ernest P. Insertion of a continuous function. (82g:54020)
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 Neubrunnova, Anna. On transfinite convergence and generalized continuity. (Russian summary) (82m:54005)
 Noiri, Takashi. Properties of S -closed spaces. (82b:54021)
 Semicontinuity and weak-continuity. (82f:54018)

secondary classifications:

- Jayne, John E. (with Rogers, C. Ambrose) Fonctions multivoques semi-continues supérieures. (English summary) [Upper semicontinuous set-valued maps] (82m:54010)
 Noiri, Takashi. Functions which preserve hyperconnected spaces. (French summary) (82b:54038)
 Popa, Valeriu. Connected monotone mappings between bitopological spaces. (Romanian. French summary) (82j:54061)
 Rogers, C. Ambrose. See Jayne, John E., (82m:54010)

54C10 Special maps: open, closed, perfect, almost open, light, etc.

- Brandenburg, Harald. A note on clopen-to-closed mappings. (82j:54015)
 Gao, Guo Shi. Paracompactness and perfect mappings. (Chinese) (82m:54006)
 Gluhov, A. D. See Homenko, M. P.; et al., (82c:54028)
 Homenko, M. P. (with Gluhov, A. D.; Plahita, L. P.) The simplest properties of q -transforms of topological spaces. (Russian) (82c:54028)
 Ikeda, Yoshito (with Kitano, Masaki) On d -mappings and some related topics. (82k:54016)

- Jayne, John E. (with Rogers, C. Ambrose) Fonctions fermées en partie. (English summary) (82a:54021)
 Kaul, Saroop K. On monotone open mappings. (82g:54021)
 Kitano, Masaki. See Ikeda, Yoshito, (82k:54016)
 Kohli, J. K. A unified approach to monotone extensions of mappings. (82g:54011)
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 Melton, Austin. Which dispersed diafactorization structures on Top are hereditary? (82g:54023)
 Michael, Ernest A. Inductively perfect maps and tri-quotient maps. (82f:54019)
 Piotrowski, Zbigniew. Continuity points in $(x) \times Y$. (French summary) (82m:54007)
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 Rogers, C. Ambrose. See Jayne, John E., (82a:54021)
 Sadryhanov, R. S. Some properties of covering mappings of finite multiplicity and their applications. (Russian) (82j:54016)
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 Wilhelm, Marek. On a question of B. J. Pettis. (Russian summary) (82a:54022)
 Wilson, David C. Mappings with 1-dimensional absolute neighborhood retract fibers. (82f:54020)
 Woodruff, Edythe P. See McAuley, Louis F., (82h:54013)

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- Baladze, V. H. Dimensions modulo a class of spaces and mappings. (Russian. Georgian and English summaries) (82a:54064)
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 Cain, George L., Jr. (with Chandler, Richard E.; Faulkner, Gary D.) Singular sets and remainders. (82k:54039)
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 Church, P. T. (with Timourian, J. G.) Deficient points of maps on manifolds. (82a:55007)
 Čoban, M. M. (with Dodon, N. K.) ★Теория P -разреженных пространств. (Russian) [Theory of P -scattered spaces] (82a:54069)
 Dickman, R. F., Jr. (with Krystock, R. L.) S -sets and S -perfect mappings. (82j:54033)
 Dodon, N. K. See Čoban, M. M., (82a:54069)
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 Grispolakis, Joachim (with Tymchatyn, E. D.) Continua which are images of weakly confluent mappings only. II. (82h:54052)
 (with Tymchatyn, E. D.) On confluent mappings and essential mappings—a survey. (82k:54055)
 Herrmann, Robert A. Convergence spaces and closed graphs. (82g:54006)
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 Joseph, James E. Pseudocompactness via graphs and projections. (82d:54003)
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 Lewis, Wayne. Monotone maps of hereditarily indecomposable continua. (82g:54051)
 Malgoire, J. (with Voisin, C.) Factorisation de Stein topologique; découpe. (82h:57013)
 Nadler, Sam B., Jr. Universal mappings and weakly confluent mappings. (82h:54057)
 Oka, Shinsuke. Every Lašnev space is the perfect image of a zero-dimensional one. (Russian summary) (82h:54062)
 Smith, J. C. Irreducible spaces and property b_1 . (82k:54032)
 Strekolovskaja, N. S. On θ -perfect irreducible pre-images of Hausdorff spaces. (Russian. English summary) (82d:54030)
 Timourian, J. G. See Church, P. T., (82a:55007)
 Tkačenko, M. G. Continuous mappings onto spaces of smaller weight. (Russian. English summary) (82a:54012)
 Tymchatyn, E. D. See Grispolakis, Joachim, (82h:54052) and (82k:54055)
 Voisin, C. See Malgoire, J., (82h:57013)

54C15 Retraction

secondary classifications:

- Čerin, Zvonko. Spaces of AANRs. (82j:54011)
 Rogers, C. Ambrose. A less strange version of Milnor's proof of Brouwer's fixed-point theorem. (82b:55004)

54C20 Extension

- Ageev, S. M. Contractibility and local contractibility properties of infinite-dimensional spaces. (Russian. English summary) (82f:54021)
 Hadžiivanov, Nikolai G. (with Hamamdziev, A. L.) The strong S -connectedness of some extensions of the space Q^ω . (Russian) (82h:54014)
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 Orsepjan, S. G. Extension of mappings of spaces to continuous mappings of their extensions. (Russian. Armenian summary) (82k:54018)
 Zaharov, V. K. The construction of all locally compact extensions. (82h:54015)

secondary classifications:

- Chandler, Richard E. (with Faulkner, Gary D.; Guglielmi, Josephine P.; Memory, Margaret C.) Generalizing the Alexandroff-Urysohn double circumference construction. (82m:54019)
 Faulkner, Gary D. See Chandler, Richard E.; et al., (82m:54019)

- Frankiewicz, Ryszard (with Gutek, Andrzej) On extending transitive homeomorphisms from the Cantor set to the product of two Cantor sets. (82h:54071)
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 Pseudocompactness and extension of functions in Franklin-Rajagopalan spaces. (82a:54042)
 Matolsky, Kálmán On extensions of syntopogenous spaces. (82i:54007)
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 Ward, L. E., Jr. Extending Whitney maps. (82m:54003)

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- Ahmed, Naeem On the embedding of a nonnormal space into a normal space. (82h:54016)
 Allen, Richard J. Equivariant embeddings of finite abelian group actions in Euclidean space. (82e:54015)
 Antonjan, S. A. The Tihonov theorem in the category of topological transformation groups. (Russian. Armenian summary) (82f:54022)
 Ishii, Tadashi On the Tychonoff functor and w -compactness. (82i:54030)
 MacGibbon, Brenda \mathcal{K} -Borelian embeddings and images of Hausdorff spaces. (82j:54019)

secondary classifications:

- Argyros, S. (with Negreponis, S.) Universal embeddings of l_n^∞ into $C(X)$ and $L^\infty(\mu)$. (82e:46054)
 Assouad, Patrice (with Deza, M.) Espaces métriques plongés dans un hypercube: aspects combinatoires. (82h:05042)
 Deza, M. See Assouad, Patrice, (82h:05042)
 Negreponis, S. See Argyros, S., (82e:46054)
 Salbany, S. An embedding characterization of compact spaces. (82m:54018)
 Väisälä, Jussi Quasisymmetric embeddings in Euclidean spaces. (82i:30031)

54C30 Real-valued functions [See also 26--XX.]

- Aron, Eleanor R. (with Hager, Anthony W.) Convex vector lattices and f -algebras. (82e:54010)
 Blair, Robert L. Extensions of Lebesgue sets and of real-valued functions. (82e:54011)
 Charatonik, Janusz J. (with Miklos, Stanislaw) Real functions on connected metric spaces. (Italian summary) (82e:54016)
 Hager, Anthony W. See Aron, Eleanor R., (82e:54010)
 Miklos, Stanislaw See Charatonik, Janusz J., (82e:54016)
 Preiss, D. (with Vilimovský, Jiří) In-between theorems in uniform spaces. (82h:54022)
 Večtomov, E. M. Ideals of rings of continuous functions. (Russian) (82g:54024)
 Vilimovský, Jiří See Preiss, D., (82h:54022)

secondary classifications:

- Debreu, Gérard (with Koopmans, Tjalling C.) Sur la décomposition additive des fonctions quasiconvexes. (English summary) [On the additive decomposition of quasiconvex functions] (82m:26016)
 Gerlits, J. (with Laczkovich, M.) On barely continuous and Baire 1 functions. (82h:54026)
 Grande, Zbigniew Sur les fonctions de deux variables équi continues par rapport à une variable. (82e:28007)
 Komornik, V. On the Korovkin closure. (82g:41023)
 Koopmans, Tjalling C. See Debreu, Gérard, (82m:26016)
 Koszela, Bogdan On some characterization of \ast -compact spaces. (Polish and Russian summaries) (82j:54032)
 On locally uniformly converging sequences. (Polish and Russian summaries) (82c:54004)
 Laczkovich, M. See Gerlits, J., (82h:54026)
 Lane, Ernest P. Insertion of a continuous function. (82g:54020)
 Levy, Ronnie Nonextendability of bounded continuous functions. (82f:54016)
 (with Rice, Michael D.) U -embedded subsets of the plane. (82i:54067)
 Mišić, Ljiljana Maximal additive and maximal multiplicative family for the family of \mathfrak{D} -Darboux Baire one functions. (Russian summary) (82h:54021)
 Raha, Asit Baran (with Srivastava, Shashi Mohan) Spaces for which Dini's theorem holds. (Russian summary) (82m:54009)
 Rice, Michael D. See Levy, Ronnie, (82i:54067)
 Šitkin, A. B. See Zamjatin, V. N., (82m:46022)
 Srivastava, Shashi Mohan See Raha, Asit Baran, (82m:54009)
 Valdivia, Manuel On some spaces of continuous functions. (Spanish. English summary) (82g:46057)
 Zamjatin, V. N. (with Šitkin, A. B.) Čebyšev centers and κ -normal spaces. (Russian) (82m:46022)

54C35 Function spaces [See also 58D15.]

- Drešević, M. M. Three variants of Kuratowski's theorem. (82e:54017)
 Gauld, David B. The graph topology for function spaces. (82h:54023)
 On the connected-open topology. (82h:54017)
 Goetschel, Roy H., Jr. (with Voxman, William L.) A pseudometric for fuzzy sets and certain related results. (82g:54025)
 Helmer, Dietrich Criteria for Eberlein compactness in spaces of continuous functions. (82j:54020)
 Kurtz, Lynn C. On uniform convergence and positive operators. (82h:54024)
 Lutzer, David J. (with McCoy, R. A.) Category in function spaces. I. (82h:54019)
 Magill, K. D., Jr. (with Subbiah, S.) Regular \mathfrak{f} -classes of semigroups of continua. (82i:54031)
 McCoy, R. A. k -space function spaces. (82d:54012)

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- See also Lutzer, David J., (82h:54019)
 Reynolds, Donald F. (with Schleusner, John W.) A note on the equiweak topology. (82i:54032)
 Schleusner, John W. See Reynolds, Donald F., (82i:54032)
 Schroder, M. Analogues of the compact-open topology. (82h:54020)
 Sinha, Dipti Mixed topology for a function space. (82i:54033)
 Subbiah, S. See Magill, K. D., Jr., (82i:54031)
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secondary classifications:

- Asanov, M. O. (with Veličko, N. V.) Compact sets in $C_p(X)$. (Russian) (82g:46054)
 Banas, Józef On the measures of noncompactness in the spaces of continuous and integrable functions. (Russian summary) (82m:47043)
 Booth, Peter (with Tillotson, J.) Monoidal closed, Cartesian closed and convenient categories of topological spaces. (82a:55021)
 Félouzis, Vaguélis Sur la convergence dans les espaces topologiques. (82k:54003)
 Jusufov, V. S. Semigroups of open continuous and homeomorphic mappings of n -dimensional Euclidean spaces. (Russian) (82d:54045)
 Katsaras, Athanasios K. Spaces of continuous functions. (French summary) (82g:46055)
 Kostyrko, Pavel A note on the convergence of transfinite sequences. (Russian summary) (82g:54007)
 Magill, K. D., Jr. (with Misra, Prabhuh Ram; Tewari, U. B.) Unifying congruences on $S(I)$. (82e:20079)
 McCoy, R. A. Necessary conditions for function spaces to be Lindelöf. (Serbo-Croatian summary) (82a:54033)
 Miraglia, Francisco Relations between structures of stable continuous functions and filtered powers. (82g:03049)
 Misra, Prabhuh Ram See Magill, K. D., Jr.; et al., (82e:20079)
 Tewari, U. B. See Magill, K. D., Jr.; et al., (82e:20079)
 Tillotson, J. See Booth, Peter, (82a:55021)
 Veličko, N. V. See Asanov, M. O., (82g:46054)
 Woodruff, David S. Complete function algebras with values in a uniform field. (82e:46084)
 Wyler, Oswald Function spaces in topological categories. (82m:54004)
 Zenor, Phillip Hereditary m -separability and the hereditary m -Lindelöf property in product spaces and function spaces. (82a:54039)

54C40 $C(X)$; algebraic techniques (ideals, etc.) [See also 46J10.]

- Artico, Giuliano (with Le Donne, Attilio; Moresco, Roberto) Algebras of real-valued uniform maps. (82f:54023)
 Aull, C. E. Approximation of continuous functions on pseudocompact spaces. (82e:54012)
 Blasco, José Luis Some results on Wallman rings. (Spanish. English summary) (82d:54013)
 Ch'en, Julie C. T. See Marin, Francisco, (82f:54028)
 Fraga, Robert J. (with Park, Young L.) On hyper-real rings of quotients. (Arabic summary) (82i:54034)
 Hager, Anthony W. Isomorphisms of some completions of $C(X)$. (82g:54026)
 Henriksen, Melvin A summary of results on order-Cauchy completions of rings and vector lattices of continuous functions. (82f:54024)
 Hoffmann, Burkhard A surjective characterization of Dugundji spaces. (82g:54027)
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 Marin, Francisco (with Ch'en, Julie C. T.) Characterization of a topological space X by the lattice $C(X, D)$. (82g:54028)
 Mason, Gordon Prime z -ideals of $C(X)$ and related rings. (82c:54013)
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 Veksler, A. I. (with Zaharov, V. K.; Koldunov, A. V.) Spaces of continuous extended functions. (Russian) (82d:54014)
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secondary classifications:

- Cherlin, Gregory Rings of continuous functions: decision problems. (82e:03019)
 Feldman, W. A. (with Porter, J. F.) The relative uniform convergence structure. (82h:46008)
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 Hunt, John H. V. (with Szymański, Waclaw) e -ultrafilters and the Stone-Čech compactification. (82a:54041)
 Magill, K. D., Jr. (with Subbiah, S.) Semigroups whose regular \mathfrak{f} -classes form well-ordered chains. (82b:20100)
 Marrero, O. A note on P -spaces. (82j:16025)
 Martínez Carracedo, Celso (with Sanz Alix, Miguel A.) Multiplicative linear forms on certain subrings of $\mathcal{C}(X)$. (Spanish) (82h:46046)
 Pol, Roman A theorem on the weak topology of $C(X)$ for compact scattered X . (82f:46027)
 Porter, J. F. (with Feldman, W. A.) Convergence structures for operators. (82h:46003)
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- Sanz Alix, Miguel A.** About certain subrings of $C(X)$. (Spanish) (82h:46070)
 See also **Martínez Carracedo, Celso** (82h:46046)
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- Aull, C. E.** Absolute C -embedding in functionally normal spaces and related spaces. (82a:54023)
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54C50 Zero sets, Baire sets and functions [See also 26A21.]

- Brown, Jack B.** (with **Gardner, R. J.**) Generalized Lusin sets and the Baire order problem. (Russian summary) (82h:54018)
García-Máñez, Adalberto Concerning α -connectedness of Baire spaces. (82f:54026)
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- Cászár, Ákos** Topogenous spaces and zero-set spaces. (82f:54038)
Fremlin, D. H. (with **Shelah, Saharon**) On partitions of the real line. (82b:03096)
Hager, Anthony W. Cozero fields. (82g:54003)
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Le Donne, Attilio On countably generated z -ideals of $C(X)$ for first countable spaces. (82f:54025)
Maharam, Dorothy An example concerning automorphisms of generalized cubes. (82c:28019)
Misra, R. Sets with countable base of neighbourhoods. (82h:54036)
Musiał, Kazimierz Projective limits of perfect measure spaces. (82i:28006)
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54C55 Absolute neighborhood extensor, absolute extensor, absolute neighborhood retract (ANR), absolute retract spaces (general properties) [See also 54F40, 55M15.]

- Antonian, S. A.** Retracts in categories of G -spaces. (Russian. Armenian and English summaries) (82f:54027)
Dranishnikov, A. N. On countably-valued retracts of a Tikhonov cube. (Russian) (82j:54023)
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Šostak, A. P. See **Mardesic, Sibe**, (82a:54024)

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- Antonian, S. A.** The Tikhonov theorem in the category of topological transformation groups. (Russian. Armenian summary) (82f:54022)
Čerin, Zvonko Spaces of AANRs. (82j:54011)
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Dobrowolski, Tadeusz (with **Toruńczyk, Henryk**) On metric linear spaces homeomorphic to I_2 and compact convex sets homeomorphic to Q . (Russian summary) (82j:57010)
Dyda, Jerzy On maps preserving LC^* -divisors. (Russian summary) (82h:54059)
Fedorčuk, V. V. Covariant functors in a category of compacta, absolute retracts and Q -manifolds. (Russian) (82j:54013)
Heath, Jo W. (with **Kozłowski, George**) Refinable maps on ANR's. (82a:57016)
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54C56 Shape theory [See mainly 55P55, 57N25.]

- Borsuk, Karol** (with **Olędzki, Juliusz**) Remark on the shape of domination. (Russian

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Kodama, Yukihiko (with **Ono, J.**) On fine shape theory. II. (82b:54028)

Mardesic, Sibe (with **Šostak, A. P.**) On the homotopy type of ANRs for p -paracompacta. (Russian summary) (82e:54018)

Nguyen To Nhu Fundamental deformation retracts and weak deformation retracts in the category of metric spaces and uniformly continuous maps. (Russian summary) (82h:54022)

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Ono, J. See **Kodama, Yukihiko**, (82b:54028)

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Šostak, A. P. See **Mardesic, Sibe**, (82e:54018)

secondary classifications:

- Bonarski, Andrzej** The theories of Professor Borsuk. (Portuguese) (82f:01080)
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Boxer, Laurence Some limit properties of C -movably regular convergence. (82h:54011)
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54C60 Set-valued maps [See also 26E25, 28B20.]

- Bardaro, Carlo** (with **Gori Cocchieri, Candida**) On the extension of a theorem of E. Baire to multifunctions. (Italian) (82g:54030)
Bellamy, David P. Set functions and continuous maps. (82f:54029)
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Holický, P. Remark on completely Baire-additive families in analytic spaces. (82h:54023)
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Lau, Ka Sing Approximation by continuous vector-valued functions. (82c:54016)
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Michael, Ernest A. Continuous selections and countable sets. (82h:54025)
Popa, Valeriu H -almost continuous multifunctions. (Romanian. English summary) (82a:54026)
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Roux, Delfina See **Massa, Silvio**, (82a:54025)
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secondary classifications:

- Alicu, Mira-Cristiana** (with **Mark, Otilia**) Some properties of the fixed points set for multifunctions. (Romanian summary) (82k:54066)
Aubin, Jean-Pierre (with **Siegel, Jerrold**) Fixed points and stationary points of dissipative multivalued maps. (82a:54081)
Burgess, John P. Careful choices—a last word on Borel selectors. (82h:03049)
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Conti, Giuseppe (with **Pejsachowicz, Jacobo**) Fixed point theorems for multivalued weighted maps. (82f:55002)
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Đỗ Hồng Tân On the contraction principle. (82e:54051)
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- Nepomnjaščii, G. M. On the spectral decomposition of multivalued absolute retracts. (Russian) (82j:54022)
- Pai, D. V. (with Veeramani, P.) Fixed-point theorems for multimappings. (82k:54076) (with Veeramani, P.) Fixed-point theorems for multimappings. (82i:54079)
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- Phan Văn Chu'ng Quelques théorèmes de point fixe aléatoire. (English summary) (82i:54079)
- Random versions of Kakutani-Ky Fan's fixed point theorem. (82k:47077)
- Popa, Valeriu A common fixed point theorem for multifunctions. (82m:54059)
- Connected monotone mappings between bitopological spaces. (Romanian. French summary) (82j:54061)
- Radu, Viorel See Constantin, Gh., (82k:54067)
- Rubinov, A. M. Turnpike sets in discrete dispersed dynamical systems. (Russian) (82a:54074)
- Salinetti, Gabriella (with Wets, Roger J.-B.) On the convergence of closed-valued measurable multifunctions. (82k:28007)
- Schirmer, Helga Conditions for the uniqueness of the fixed point in Kakutani's theorem. (82k:54079)
- Siegel, Jerrold See Aubin, Jean-Pierre, (82a:54081)
- Turinici, Mihai Multivalued contractions and applications to functional-differential equations. (82h:54083)
- Veeramani, P. See Pai, D. V., (82i:54079) and (82k:54076)
- Wets, Roger J.-B. See Salinetti, Gabriella, (82k:28007)

54C65 Selections [See also 28B20.]

- van Mill, Jan (with Wattel, Evert) Selections and orderability. 82i:54038
- Miller, Douglas E. Borel selectors for separated quotients. 82d:54016
- Wattel, Evert See van Mill, Jan, 82i:54038

secondary classifications:

- Benkő, Iosif A note on affine selection and separation. (82a:46012)
- Farber, M. Š. Smooth sections of the intersection of multivalued mappings. (Russian. Azerbaijani and English summaries) (82k:90097)
- Jayne, John E. (with Rogers, C. Ambrose) Fonctions multivoques semi-continues supérieurement. (English summary) [Upper semicontinuous set-valued maps] (82m:54010)
- Le Donne, Attilio (with Marchi, Maria Vittoria) Representation of Lipschitzian compact-convex valued mappings. (Italian summary) (82k:49033)
- Marchi, Maria Vittoria See Le Donne, Attilio, (82k:49033)
- Mauldin, R. Daniel (with Srivastava, Shashi Mohan) Paramétrisations des ensembles coanalytiques à coupes relativement non maigres. (82e:54044)
- McClendon, J. F. Note on a selection theorem of Mas-Colell. (82i:55003)
- Michael, Ernest A. Continuous selections and countable sets. (82h:54025)
- Rogers, C. Ambrose See Jayne, John E., (82m:54010)
- Sommer, M. Continuous selections for metric projections. (82h:41037)
- Srivastava, Shashi Mohan Selection and representation theorems for σ -compact valued multifunctions. (82m:04002)

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54C70 Entropy

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- Block, Louis (with Guckenheimer, John; Misiurewicz, Michał; Young, Lai Sang) Periodic points and topological entropy of one-dimensional maps. (82j:58097)
- Grošek, Otokar Entropy on algebraic lattices. (Russian. English summary) (82e:06004)
- Guckenheimer, John See Block, Louis; et al., (82j:58097)
- Misiurewicz, Michał (with Szlenk, W.) Entropy of piecewise monotone mappings. (82i:58030)
- See also Block, Louis; et al., (82j:58097)
- Sasano, Kazuhiro Topological entropy and periodic points of maps of the circle. (82j:58098)
- Szlenk, W. See Misiurewicz, Michał, (82a:58030)
- Young, Lai Sang See Block, Louis; et al., (82j:58097)

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- Azad, K. K. See Srivastava, Pramila, 82h:54030
- Blasco, José Luis Two questions on Wallman rings. 82e:54017
- Boyarsky, Abraham (with Scarowsky, Manuel) A theorem on the denseness of orbits in metric spaces. 82d:54017
- Godefroy, Gilles Compacts de Rosenthal. (English summary) 82i:54030
- Grispolakis, Joachim On Čech cohomology and weakly confluent mappings into ANRs. 82i:54031
- Hoffmann, Burkhard Locally Dugundji spaces and quotient spaces of locally compact groups. 82g:54031
- Holsztyński, Włodzimierz (with Strube, R.) Universal maps of Cartesian products. 82i:54023
- Kloeden, P. E. Compact supported endographs and fuzzy sets. 82a:54028
- Kulpa, W. Factorization theorems for extensions of maps. 82i:54032
- Matyhin, V. I. Tracing by homeomorphism. (Russian) 82m:54011
- Montes y Gómez Daza, Alejandro On locally defined ideals and pseudocompact topologies. (Spanish) 82e:54019
- Nguyễn Nhựt Almost convex sets in metric spaces and the problem of extending uniformly continuous mappings. (Vietnamese. English summary) 82m:54012
- Šapirovskii, B. E. Mappings on Tikhonov cubes. (Russian) 82d:54018
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- Srivastava, Pramila (with Azad, K. K.) On lattice invariant topological properties. 82h:54030

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secondary classifications:

- Babaev, Ė. A. Ordered sets with a zero and a one, topological spaces and semiheaps of mappings. (Russian. Azerbaijani and English summaries) (82h:06001)
- Benkő, Iosif Continuous families of subspaces. (Romanian. English summary) (82i:54014)
- Clausing, Achim Retractions and open mappings between convex sets. (82h:52006)
- Feuerbacher, Gary A. Weakly chainable circle-like continua. (82e:54029)
- Handel, David Some existence and nonexistence theorems for k -regular maps. (82i:57018)
- Harao, Masateru (with Noguchi, Shoichi) Global mapping space of cellular systems. (82i:68036)
- Koldunov, A. V. See Zaharov, V. K., (82g:54018)
- Kozzela, Bogdan Continuous images of σ -compact spaces. (Polish and Russian summaries) (82k:54035)
- Layek, A. K. (with Mukhopadhyay, S. N.) Intersection of sectorial cluster sets and directional essential cluster sets. (82k:26017)
- Lelek, A. The span of mappings and spaces. (82e:54031)
- Lévy, Ronnie (with Rice, Michael D.) The number of compact fibers of mappings on Banach spaces. (82i:58010)
- Libre, Jaume Sufficient conditions for a continuous map of \mathbb{R}^n into itself to have m -periodic points for all $m > 0$. (82i:58074)
- Malkin, M. I. Topological conjugacy of discontinuous mappings of an interval. (Russian) (82i:58056)
- Mukhopadhyay, S. N. See Layek, A. K., (82k:26017)
- Murti, A. Sita Rama A generalization of x -ideals. (82k:08004a)
- A generalization of x -ideals. II. (82k:08004b)
- Nadler, Sam B., Jr. Examples of fixed point free maps from cells onto larger cells and spheres. (82i:54077)
- Noguchi, Shoichi See Harao, Masateru, (82i:68036)
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- Rice, Michael D. See Lévy, Ronnie, (82i:58010)
- Sakai, Katsuro The space of retractions of a compact Q -manifold is an l^2 -manifold. (82j:57011)
- Snipes, Ray F. Cauchy-regular functions. (82i:54042)
- Treybig, L. B. "Extending" maps of arcs to maps of ordered continua. (82j:54076)
- Tukia, Pekka (with Väisälä, Jussi) Quasisymmetric embeddings of metric spaces. (82g:30038)
- Väisälä, Jussi See Tukia, Pekka, (82g:30038)
- Vilimovský, Jiří Several extremal coreflective classes in uniform spaces. (82e:54025)
- Warga, J. On bounding, interior and covering functions. (82k:49039)
- Wilansky, Albert Mazur spaces. (82i:46001)
- Zaharov, V. K. (with Koldunov, A. V.) Sequential absolute and its characterization. (Russian) (82g:54018)

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- Grayson, R. J. Concepts of general topology in constructive mathematics and in sheaves. (82g:03105)

54D05 Connected and locally connected spaces (general aspects)

- García-Máñez, Adalberto Property C, Wallman basis and S -metrizability. 82j:54024
- Mancuso, Vincent J. Almost locally connected spaces. 82k:54025
- Neumann-Lara, Victor Autonomous subsets of topological spaces. 82k:54026
- Noiri, Takashi A note on hyperconnected sets. 82a:54029
- Raisonnier, Jean Composantes connexes et quasi-composantes connexes itérées dans les espaces polonais. (English summary) 82j:54025

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- Beer, Gerald Which connected metric spaces are compact? (82m:54026)
- Clay, Jesse P. (with Joseph, James E.) On a connectivity property induced by the θ -closure operator. (82d:54020)
- García-Máñez, Adalberto Concerning σ -connectedness of Baire spaces. (82i:54026)
- Heath, Philip R. (with Norton, Graham H.) Equiconnectivity and cofibrations. I. (82m:55008)
- Joseph, James E. See Clay, Jesse P., (82d:54020)
- Lehman, B. K -coherence is cyclically extensible and reducible. (82j:54084)
- Maheshwari, S. N. (with Tapi, U.) Sur les espaces bitopologiques σ -connexes. (82i:54052)
- Mršević, Milla On connectivity properties of hyperspaces of R_0 spaces. (82d:54007)
- Norton, Graham H. See Heath, Philip R., (82m:55008)
- Oswald, Peter On a connectedness property of the complements of zero-neighbourhoods in topological vector spaces. (82k:46007)
- Pu, H. H. See Pu, H. W., (82k:54014)
- Pu, H. W. (with Pu, H. H.) On Darboux continuity and continuity. (82k:54014)
- Tapi, U. See Maheshwari, S. N., (82i:54052)

54D10 Separation axioms, $T_0 - T_3$

- Cagliari, F. (with Cichese, M.) Separation properties and compactifications of topological spaces which are not T_0 . (See 82i:54001)
- Cammaroto, Filippo On the standard T_3 -closure and the Katětov extension of a similar topological space T_2 . (Italian. English summary) 82k:54027

- Cicchese, M. See Cagliari, F., (See 82f:54001)
 Heldermaun, N. C. Developability and some new regularity axioms. 82m:54013
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- Chvalina, Jan Separation properties of topologies associated with digraphs. (82g:54062)
 Domiaty, R. Z. Life without T_2 . (82j:83039)
 Fleissner, William G. A T_8 space which is not Katětov T_8 . (82c:54020)
 Hoffmann, Rudolf-E. Essential extensions of T_1 -spaces. (82j:18009)
 Kohli, J. K. s -continuous functions and certain weak forms of regularity and complete regularity. (82f:54017)
 Margalef Roig, J. (with Outerelo Domínguez, E.) A note on paracompact spaces. (Spanish) (82j:54029)
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54D15 Higher separation axioms (completely regular, normal, perfectly or collectionwise normal, etc.)

- Chaber, József (with Zenor, Phillip) On perfect subparacompactness and a metrization theorem for Moore spaces. 82i:54040
 Locally finite unions of metric spaces. 82b:54026
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 Przymusiński, Teodor C. (with Wage, Michael L.) Collectionwise normality and extensions of locally finite coverings. 82a:54030
 Reilly, I. L. See Gauld, David B.; et al., 82c:54021
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- Artico, Giuliano (with Moresco, Roberto) An answer to a question on hyperspaces. (82m:54038)
 Chiba, Keiko On the normality of product spaces. (82c:54010)
 Čigogidze, A. Č. Properties close to bicompleteness. (Russian) (82d:54024)
 Cochran, Allan C. Complete regularity for convergence spaces. (82b:54004)
 Császár, Ákos Normality is productive. (82i:54005)
 García-Maynez, Adalberto Property C , Wallman basis and S -metrizability. (82j:54024)
 Heldermaun, N. C. Developability and some new regularity axioms. (82m:54013)
 Kent, Darrell C. (with Richardson, Gary D.) Completely regular and ω -regular spaces. (82b:54008)
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 Mysior, A. A regular space which is not completely regular. (82j:54026)
 Reed, G. M. On normality and countable paracompactness. (82d:54033)
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54D18 Paracompactness, pointwise paracompactness, etc.

- Burke, Dennis K. Para-Lindelöf spaces and closed mappings. 82j:54027
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 Davis, S. W. (with Smith, J. C.) The paracompactness of precompact spaces. 82b:54032
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 Martin, Harold W. Linearly ordered covers, normality and paracompactness. 82b:54027
 Mashhour, A. S. (with Hasanein, I. A.) On S -closed spaces and almost (nearly) strong paracompactness. 82k:54031
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- Arhangel'skii, A. V. On the pseudocharacter of sets in families and spaces (on a question of Čigogidze). (Russian. Georgian and English summaries) (82i:54011)
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- Antonjan, S. A. (with Smirnov, Ju. M.) Universal objects and bicompleteness extensions for topological groups of transformations. (Russian) (82i:54072)
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- 54F65** Topological characterizations of particular spaces
- Firby, P. A.** Independence structures and topological dimension. **82b:54051**
- Ivanov, A. V.** Superextensions of metrizable continua and Cantor's discontinuum. (Russian) **82i:54066**
- Ursini, Aldo** On some Stone spaces. (Italian summary) **82d:54041**
- Warner, M. W.** The tolerability of subspaces of the real line. **82a:54068**
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- Błaszczyk, Aleksander** (with Szymański, Andrzej) Concerning Parovitenko's theorem. (Russian summary) **(82j:54042)**
- Broverman, S.** (with Weiss, William A. R.) Spaces co-absolute with $\beta\mathbb{N} - \mathbb{N}$. **(82g:54039)**
- Graham, Barry Glenn** On contractible fans. **(82i:54065)**
- Szymański, Andrzej** See **Błaszczyk, Aleksander**, **(82j:54042)**
- Weiss, William A. R.** See **Broverman, S.**, **(82g:54039)**

54F99 None of the above, but in this section

Levy, Ronnie (with Rice, Michael D.) U -embedded subsets of the plane. 82i:54067
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Földes, Stéphane (with Steinberg, Richard) A topological space for which graph embeddability is undecidable. (82d:03073)
Imrich, Wilfried On metric properties of tree-like spaces. (82e:05059)
Meres, Lucjan Some properties of G_δ type sets in two-dimensional Euclidean space. (Polish, Russian and English summaries) (82g:54012)
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54G05 Extremely disconnected spaces, F -spaces, etc.

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Dickman, R. F., Jr. (with Porter, J. R.; Rubin, L. R.) Completely regular absolutes and projective objects. 82h:54061
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Szymański, Andrzej Undecidability of the existence of regular extremely disconnected S -spaces. (82i:54016)

54G10 P -spaces

Balcar, Bohuslav (with Frankiewicz, Ryszard; Mills, Charles F.) More on nowhere dense closed P -sets. (Russian summary) 82i:54068
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Mills, Charles F. See Balcar, Bohuslav; et al., 82i:54068
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Terasawa, Jun Spaces $NU\mathfrak{g}$ and their dimensions. (82k:54040)

54G99 None of the above, but in this section

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Frolík, Zdeněk (with Holický, P.) Decomposability of completely Suslin-additive families. (82h:28003)
Holický, P. Remark on completely Baire-additive families in analytic spaces. (82h:54023)
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Kaniewski, J. (with Rogers, C. Ambrose) Double uniformization. (82d:04002)
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Krupskii, V. N. Completely enumerable sets in effective metric spaces. (Russian, English summary) (82a:03042)
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Miller, Arnold W. On generating the category algebra and the Baire order problem. (Russian summary) (82k:04005)
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Pelant, Jan (with Pták, Pavel) The complexity of σ -discretely decomposable families in uniform spaces. (82k:54047)
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Asterisque See Louveau, Alain, (82j:03062)
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London ★Analytic sets. (82m:03063)

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Davis, Gary Permutation representation of groups with Boolean orthogonalities. (82h:06023)

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 Vojtáš, Peter See Balcar, Bohuslav; et al., (82h:06019)

54H12 Topological lattices, etc. [See also 06B30, 06F30.]

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 Erné, Marcel Topologies on products of partially ordered sets. I. Interval topologies. (82m:54028a)
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 Scott, Dana S. See Gierz, Gerhard; et al., (82h:06005)
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54H13 Topological fields, rings, etc. {For algebraic aspects, see 12Jxx, 13Jxx, 16A80.}

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 Antonjan, S. A. The Tikhonov theorem in the category of topological transformation groups. (Russian. Armenian summary) (82i:54022)
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 Arhovit, John Topological algebra representations of topological groups. (82a:22003)
 Bandelt, Hans-J. Isomorphisms between semigroups of isotone maps. (82g:20102)
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- Benda, Miroslav. Modeloids. I. (82g:00002)
- Block, Louis. Periods of periodic points of maps of the circle which have a fixed point. (82h:58042)
- Cammon, J. W. (with Daverman, Robert J.) A totally wild flow. (82m:57006)
- Čikova, I. A. Ljapunov stability in discontinuous dispersive dynamical systems. (Russian) (82c:34050)
- Coste, Jean. Iterations of transformations on the unit interval: approach to a periodic attractor. (82d:58040)
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- Coven, Ethan M. (with Reddy, William L.) Positively expansive maps of compact manifolds. (82h:58024)
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- Glasner, S. Divisible properties and the Stone-Čech compactification. (82a:54040)
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- Leibo, A. M. Topological structure of a type of unstable fixed point of a mapping of a plane into a plane. (Russian) (82c:58059)
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- Misiurewicz, Michał (with Szlenk, W.) Entropy of piecewise monotone mappings. (82a:58030)
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- Bocşan, Gh. A general random fixed point theorem and applications to random equations. (82m:60074)
- Brechner, Beverly (with Mayer, John C.) The prime end structure of indecomposable continua and the fixed point property. (82g:54047)
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- Aron, Eleanor R. (with Hager, Anthony W.) Convex vector lattices and l -algebras. (82c:54010)
- Babaev, É. A. Ordered sets with a zero and a one, topological spaces and semiheaps of mappings. (Russian. Azerbaijani and English summaries) (82b:06001)
- Bachman, George (with Sultan, Alan) On regular extensions of measures. (82f:28016)
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- Benabdallah, Khalid (with Robert, Serge) Intersections finies de sous-groupes nets. (82a:20056)
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- Fontana, Marco Quelques nouveaux résultats sur une classe d'espaces spectraux. (Italian summary) (82j:06024)
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- Smurov, M. V. On topological inhomogeneity of spaces of $\exp K^*$ -type. (Russian) (82i:54039)
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- Measure Theory and its Applications ★Measure theory and its applications. (82g:28002)

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- Measure theory and its applications ★Measure theory and its applications. (82g:28002)

54J05 Nonstandard topology [See also 03Hxx.]

- Herrmann, Robert A. A nonstandard approach to S -closed spaces. 82i:54084

secondary classifications:

- Herrmann, Robert A. A nonstandard approach to pseudotopological compactifications. (82b:03113)
- Janz, Arnold ★Eine neue Variante der Nichtstandard-Analyse und einige ihrer Anwendungen in der allgemeinen Topologie. (German) [A new variant of nonstandard analysis and some of its applications in general topology] (82m:03072)

55-XX ALGEBRAIC TOPOLOGY

55-01 Elementary exposition, textbooks

- Dold, Albrecht ★Lectures on algebraic topology. 82c:55001
- Giblin, P. J. ★Graphs, surfaces and homology. 82m:55001

secondary classifications:

- Adams, John Frank Algebraic topology. A student's guide. (Russian) (82b:55001)
- Engelking, Ryszard (with Sieklucki, Karol) ★Geometria i topologia. Część II. (Polish) [Geometry and topology. Part II] (82i:54001)
- See also Kuratowski, Kazimierz, (82a:54001)
- Gould, P. Q -analysis, or a language of structure: an introduction for social scientists, geographers and planners. (82b:92001)
- Jäger, Joachim ★Elementare Topologie. (German) [Elementary topology] (82j:54001)
- Kosiński, Czes ★A first course in algebraic topology. (82c:57001)
- Kuratowski, Kazimierz ★Wstęp do teorii mnogości i topologii. (Polish) [Introduction to set theory and topology] (82a:54001)
- Sieklucki, Karol See Engelking, Ryszard, (82i:54001)

55-02 Advanced exposition (research surveys, monographs, etc.)

- Adams, John Frank Algebraic topology. A student's guide. (Russian) 82b:55001
- (Birman, Joan S.) See Seifert, Herbert; et al., 82b:55001
- (Goldman, Michael A.) See Seifert, Herbert; et al., 82b:55001
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- Seifert, Herbert (with Threlfall, William) ★Seifert and Threlfall: a textbook of topology. 82b:55001
- Threlfall, William See Seifert, Herbert, 82b:55001

secondary classifications:

- Wu, Wen Jun de Rham-Sullivan measure of spaces and its calculability. (82f:55022)

55-03 Historical (must also be assigned at least one classification number from Section 01)

- Sieberg, Hans Willi Some historical remarks concerning degree theory. 82c:55001

secondary classifications:

- Aleksandrov, P. S. ★Избранные труды. Том III. (Russian) [Selected works. Vol. III] (82f:01179)
- James, I. M. The work of Daniel Quillen. (82g:01057)
- (Quillen, Daniel) See James, I. M., (82g:01057)
- Bibliography:
- Aleksandrov, P. S. See Aleksandrov, P. S., (82f:01179)

55-04 Explicit machine computation and programs (not the theory of computation or programming)

- Kojima, Masakazu A note on "A new algorithm for computing fixed points" by van der Laan and Talman. (See 80k:65010)
- (van der Laan, Gerard) See Kojima, Masakazu, (See 80k:65010)
- Stynes, Martin An algorithm for numerical calculation of topological degree. 82g:55001
- On the construction of sufficient refinements for computation of topological degree. 82i:55001
- (Talman, A. J. J.) See Kojima, Masakazu, (See 80k:65010)

secondary classifications:

- van der Laan, Gerard (with Talman, A. J. J.) Convergence and properties of recent variable dimension algorithms. (82e:65057)
- Talman, A. J. J. See van der Laan, Gerard, (82e:65057)
- Todd, Michael J. Global and local convergence and monotonicity results for a recent variable-dimension simplicial algorithm. (82e:65058)

55-06 Proceedings, conferences, etc.

- (Fadell, Edward) See Fixed point theory, 82m:55002
- (Fournier, Gilles) See Fixed point theory, 82m:55002
- (Mardesic, Sibe) See Shape theory and geometric topology, 82m:55003
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- Tiraspol, General Topology and its Applications** ★IV Тираспольский Симпозиум по Общей Топологии и ее Приложениям. (Russian) [Fourth Tiraspol Symposium on General Topology and its Applications] (82b:54001)
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55Mxx Classical topics {For the topology of Euclidean spaces and manifolds, see 57N05, 57N10, 57N15.}

55M05 Duality

- Brasselet, Jean-Paul** Sur les morphismes de dualité. 82k:55002
Massey, William S. A generalization of the Alexander duality theorem. 82f:55001

secondary classifications:

Chen, Kuo Tsai On the Hopf index theorem and the Hopf invariant. (82e:57012)

55M10 Dimension theory [See also 54F45.]

- Melija, V. I.** (with Sitnikov, K. A.) On the second fundamental theorem of homological dimension theory. (Russian) 82b:55002
Sitnikov, K. A. See Melija, V. I., 82b:55002
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- Church, P. T.** (with Timourian, J. G.) Deficient points of maps on manifolds. (82a:55007)
Hadžiivanov, Nikolai G. (with Todorov, Vladimir T.) On dimensional components of compact spaces. (82k:54059)
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Reichel, Hans-Christian Zur Entwicklung des Dimensionsbegriffes. (82c:01040)
Timourian, J. G. See Church, P. T., (82a:55007)
Todorov, Vladimir T. The solution of a problem of P. S. Aleksandrov on V^p -continua. (Russian) (82j:54070)
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55M15 Absolute neighborhood retracts [See also 54C55, 54F40.]

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- Chapman, T. A.** Invariance of torsion and the Borsuk conjecture. (82i:57019)
Lashof, R. The equivariant extension theorem. (82k:57031)
Ringelsen, R. D. (with White, Arthur T.) On pseudosurface imbeddings of $K_{m,n}$ and certain joins of graphs. (82j:05054)
Singh, Sukhjot Toroidal decompositions of S^3 and a family of 3-dimensional ANR's (AR's). (82g:54029)
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55M20 Fixed points and coincidences [See also 54H25.]

- Alicu, Mira-Cristiana** Remarks on the Borsuk-Ulam theorem. 82a:55002
Bárány, Imre (with Šlosman, S. B.; Szűcs, András) On a topological generalization of a theorem of Tverberg. 82d:55001
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Davidjan, V. R. Coincidence points of two mappings. (Russian) 82a:55003
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Holsztynski, Włodzimierz Common fixed points of compact ANRs. (Russian summary) 82a:55004

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- Brooks, Peter S.** Infinite retrogression in the Eaves-Saigal algorithm. (82d:90102)
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Cohen, Daniel I. A. On the Kakutani fixed point theorem. (82b:90102)
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Fournier, Gilles Fixed point principles for cones of a linear normed space. (82e:47072)
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Shizuma, Ryoji (with Uno, Saeko) Poincaré's last geometric theorem. (Japanese. English summary) (82j:54090)
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Stynes, Martin An N -dimensional bisection method for solving systems of N equations in N unknowns. (82f:65062a)
 An N -dimensional bisection method for solving systems of N equations in N unknowns. (82f:65062b)
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55M25 Degree, winding number

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Antonovskii, E. Ja. Construction of the degree for proper almost strongly Fredholm mappings. (Russian) (82h:58013)

Ewert, Janina Homotopical properties and the topological degree for γ -contraction vector fields. (Russian summary) (82a:47082)

Hudaverdjan, O. M. (with Švarc, A. S.) Multiplicative functionals and gauge fields. (Russian. English summary) (82f:81063)

Jehle, Herbert Topological characterization of leptons, quarks and hadrons. (82i:81152)

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Some historical remarks concerning degree theory. (82e:55001)

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Vogt, Andrew The isoperimetric inequality for curves with self-intersections. (82g:53005)

55M30 Ljusternik-Schnirelman (Šnirel'man) category of a space

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55M35 Finite groups of transformations (including Smith theory) [See also 57S17.]

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Abelian p -group actions on homology spheres. (82j:57038)

Edmonds, Allan L. Orientability of fixed point sets. (82h:57032)

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Masuda, Mikiya Cohomology of S^1 -orbit spaces of cohomology spheres and cohomology complex projective spaces. (82j:57035)

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Skurikhin, E. E. Dimension of completely regular spaces. (Russian) (82d:54019)

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55Nxx Homology and cohomology theories [See also 57Txx.]

55N05 Čech types

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Grispolakis, Joachim On Čech cohomology and weakly confluent mappings into ANRs. (82f:54031)

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55N07 Steenrod-Sitnikov homologies

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55N10 Singular theory

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55N15 K -theory [For algebraic K -theory, see 18F25.]

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Fujii, Kazuyuki A representation of real K -groups by means of a Banach algebra. (82b:46061)

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55N20 Generalized (extraordinary) homology and cohomology theories

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55N22 Bordism and cobordism theories, formal group laws [See also 14L05, 57R75, 57R77, 57R85, 57R90.]

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55N30 Sheaf cohomology [See also 18F20, 32C35, 32L10.]

55N35 Other homology theories

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- Farmer, Frank D. Cellular homology for posets. (82k:18013)
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55N45 Products and intersections

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- Koloso, V. E. Homotopic self-equivalence of highly connected manifolds. (Russian) (82c:57025)
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- Chen, Kuo Tsai Pullback path fibrations, homotopies and iterated integrals. (82c:58004)
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- Miminošvili, Z. R. On strong homotopy in the category of sequences of topological spaces and its applications to shape theory. (Russian. Georgian and English summaries) (82c:55012)

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55Q20 Homotopy groups of wedges, joins, and simple spaces

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55Q55 Cohomotopy groups

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55Q70 Homotopy groups of special types [See also 55N05, 55N07.]

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55R05 Fiber spaces

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Geometry ★Проблемы геометрии. Том 9. (Russian) [Problems in geometry. Vol. 9] **(82k:53054a)**

Itogi Nauki i Tehniki ★Проблемы геометрии. Том 9. (Russian) [Problems in geometry. Vol. 9] **(82k:53054a)**

Problems in geometry ★Проблемы геометрии. Том 9. (Russian) [Problems in geometry. Vol. 9] **(82k:53054a)**

55R15 Classification

Milson, John J. Real vector bundles with discrete structure group. **82i:55016**

Sen, R. N. The domain of definition of bundle representations. **82g:55017**

secondary classifications:

Goldman, William M. (with Hirsch, Morris W.) Flat bundles with solvable holonomy. **(82e:57010)**

Hirsch, Morris W. See Goldman, William M. **(82e:57010)**

55R20 Spectral sequences and homology of fiber spaces [See also 55Txx.]

Helaja, L. G. Homology of the Whitney sum of fiber spaces. (Russian. Georgian and English summaries) **82a:55017**

Saenz Lorenzo, José F. Cohomology of fiber bundles over symmetric spaces. (Spanish) **82h:55016**

Schön, Rolf A remark on the Hilton-Roitberg-Zeeman comparison theorem for fibrations. **82f:55023**

secondary classifications:

Jaworowski, Jan A continuous version of the Borsuk-Ulam theorem. **(82h:55017)**

Tanré, Daniel Modèles de Quillen d'une fibration de Serre. (English summary) **(82g:55012)**

55R25 Sphere bundles and vector space bundles

Handel, David Approximation theory in the space of sections of a vector bundle. **82h:55016**

Jaworowski, Jan A continuous version of the Borsuk-Ulam theorem. **82h:55017**

Prevot, Kenneth J. Imbedding smooth involutions in trivial bundles. **82a:55018**

Rudjak, Ju. B. On the Thom-Dold isomorphism for nonorientable vector bundles. (Russian) **82h:55018**

secondary classifications:

Boya, Luis J. (with Carriñena, José F.; Mateos, Juan) Homotopy and solitons. **(82b:81054)**

Carriñena, José F. See Boya, Luis J.; et al. **(82b:81054)**

Gómez, Francisco Extension of cross-sections and a generalized de Rham theorem. (Spanish summary) **(82i:58004)**

Hegenbarth, Friedrich Secondary cohomology operations applied to the Thom class. **(82h:55020)**

- Kawakubo, Katsuo Compact Lie group actions and fiber homotopy type. (82f:57027)
 Mateos, Juan See Boya, Luis J.; et al., (82b:81054)
 Naoum, Adil G. Connected sums of 3-connected manifolds with sphere bundles over spheres. (Arabic summary) (82j:57034)
 do Patrocinio, Antônio Carlos Nonembedding in sphere bundles. (82e:57015)
 Quinto, Eric Todd Topological restrictions on double fibrations and Radon transforms. (82g:58084)
 Wisemann-Hartmann, Cornelia Spherical fibrations and manifolds. (82e:57006)

55R35 Classifying spaces of groups and H -spaces

- Seymour, Robert Some remarks on fibrations of monoids and their classifying spaces. 82j:55022

secondary classifications:

- McGibbon, C. A. Stable properties of rank 1 loop structures. (82e:55018)
 Stretch, C. T. Stable cohomology and cobordism of abelian groups. (82h:55015)
 Thomas, C. B. Maps between real classifying spaces. (82e:55004)

55R40 Homology of classifying spaces, characteristic classes [See also 57Txx, 57R20.]

- Aguadé i Bover, Jaume A note on realizing polynomial algebras. 82g:55018
 Bahri, A. P. (with Mahowald, Mark) Stiefel-Whitney classes in $H^*BO\langle\varphi(r)\rangle$. 82k:55017
 Eckmann, Beno (with Mislin, Guido) On the Euler class of representations of finite groups over real fields. 82i:55024
 Feshbach, Mark The image of $H^*(BG, \mathbb{Z})$ in $H^*(BT, \mathbb{Z})$ for G a compact Lie group with maximal torus T . 82g:55019
 Mahowald, Mark See Bahri, A. P., 82k:55017
 Mislin, Guido See Eckmann, Beno, 82i:55024
 Schwartz, M.-H. Classes et caractères de Chern des espaces linéaires. 82h:55019
 Segal, Graeme (with Stretch, C. T.) Characteristic classes for permutation representations. 82h:55020
 Stretch, C. T. See Segal, Graeme, 82h:55020
 Wu, Zhen De The KO -groups and J -groups of the complex Stiefel manifolds W_{2n} . (Chinese) 82m:55021

secondary classifications:

- Feshbach, Mark Some general theorems on the cohomology of classifying spaces of compact Lie groups. (82e:55005)
 Fulton, William (with Johnson, Kent) Canonical classes on singular varieties. (82c:14017)
 Handel, David Approximation theory in the space of sections of a vector bundle. (82h:55016)
 Johnson, Kent See Fulton, William, (82c:14017)
 Kadeišvili, T. V. On the theory of homology of fiber spaces. (Russian) (82a:57041a)
 Kaminker, Jerome (with Miller, John Grier) A comment on the Novikov conjecture. (82m:57018)
 Kono, Akira (with Nagata, Masatsugu) Homology of $(KSC)_n$ over the Dyer-Lashof algebra. (82e:55031)
 Liu, Zong Ze See Wu, Zhen De, (82m:55022)
 Miller, John Grier See Kaminker, Jerome, (82m:57018)
 Nagata, Masatsugu See Kono, Akira, (82e:55031)
 Smirnov, V. A. Homology of fiber spaces. (Russian) (82a:57041b)
 Wu, Zhen De (with Liu, Zong Ze) The KO -groups and J groups of real (quaternionic) Stiefel manifolds $V_{n,2}(X_{n,2})$. (Chinese) (82m:55022)

55R45 Homology and homotopy of BO and BU ; Bott periodicity55R50 Stable classes of vector space bundles, K -theory (For algebraic K -theory, see 18F25.)

- Fujii, Kensō (with Sugawara, Masahiro) The order of the canonical element in the J -group of the lens space. 82f:55025
 Liu, Zong Ze See Wu, Zhen De, 82m:55022
 Priddy, Stewart On a conjecture concerning $K_*(\mathbb{Z}/p^2)$. 82i:55017
 Sugawara, Masahiro See Fujii, Kensō, 82f:55025
 Wu, Zhen De (with Liu, Zong Ze) The KO -groups and J groups of real (quaternionic) Stiefel manifolds $V_{n,2}(X_{n,2})$. (Chinese) 82m:55022

secondary classifications:

- Snaith, Victor A model for equivariant K -theory. (82i:55002)

55R55 Fiberings with singularities

secondary classifications:

- Raymond, Frank (with Vasquez, Alphonse T.) 3-manifolds whose universal coverings are Lie groups. (82i:57011)
 Vasquez, Alphonse T. See Raymond, Frank, (82i:57011)

55R60 Microbundles and block bundles [See also 57N55, 57Q50.]

- Munkholm, Hans J. A chain level transfer homomorphism for PL fibrations. 82g:55020

secondary classifications:

- Hurder, Steven On the homotopy and cohomology of the classifying space of

Riemannian foliations. (82j:57029)

55R65 Generalizations of fiber spaces and bundles

- Čerin, Zvonko Shape fibrations, F -stability and FR -stability. (Russian summary) 82b:55017
 Ferry, Steve A stable converse to the Vietoris-Smale theorem with applications to shape theory. 82e:55018
 Goodearl, K. R. (with Rushing, T. B.) Direct limit groups and the Keesling-Mardetić shape fibration. 82g:55021
 Penna, Michael A. Euler classes of combinatorial manifolds. 82i:55018
 Rushing, T. B. See Goodearl, K. R., 82g:55021
 Seymour, Robert (with Snaith, Victor) A J -homomorphism associated with a space of empty varieties (addenda and corrigenda to two papers on the J -homomorphism). 82h:55018
 Smith, J. Wolfgang Fiber homology and orientability of maps. 82f:55026
 Snaith, Victor See Seymour, Robert, 82h:55018
 Ungar, Šime Shape bundles. 82e:55030

secondary classifications:

- Husch, L. S. Approximate, Hurewicz and shape fibrations. (82f:55019)
 Yates, R. G. Fibre bundles and supersymmetries. (82a:83056)

55R99 None of the above, but in this section

- Booth, Peter (with Heath, Philip R.; Morgan, Chris; Piccinini, Renzo) Remarks on the homotopy type of groups of gauge transformations. 82e:55019
 Heath, Philip R. See Booth, Peter; et al., 82e:55019
 Mihai, Alexandru Sur les fibres en droites uniformisables. 82d:55015
 Morgan, Chris See Booth, Peter; et al., 82e:55019
 Piccinini, Renzo See Booth, Peter; et al., 82e:55019

secondary classifications:

- Asorey, M. Some remarks on the classical vacuum structure of gauge field theories. (82d:81094)
 Auer, Jan W. Fiber integration and Poincaré duality. (82d:58002)
 Bass, D. W. Topological classification of endomorphisms of real line bundles. (82e:58085)
 Topological classification of endomorphisms of complex line bundles. (82e:58086)
 Boya, Luis J. (with Mateos, Juan) The kink: real Hopf bundle and Morse theory. (82g:81050)
 Bullett, Shaun Braid orientations and Stiefel-Whitney classes. (82m:57020)
 Cheng, Koung Ping The horizontal holonomy group of a fibre bundle space. (82k:53046)
 Efremovič, V. A. See Vainstein, A. G.; et al., (82h:53085)
 Gorelik, E. M. See Vainstein, A. G.; et al., (82h:53085)
 Mateos, Juan See Boya, Luis J., (82g:81050)
 Munkholm, Hans J. Transfer on algebraic K -theory and Whitehead torsion for PL fibrations. (82d:18014)
 Oka, Mutsuo Correction to: "Deformation of Milnor fiberings" [J. Fac. Sci. Univ. Tokyo Sect. IA Math. 20 (1973), 397-400; MR 48 #11564]. (82e:32011)
 Schaposnik, Fidel (with Solomin, J. E.) Fibre bundle analysis of topological charges in spontaneously broken gauge theories. (82c:81117)
 Solomin, J. E. See Schaposnik, Fidel, (82c:81117)
 Stolz, Stephan ★Beziehungen zwischen Transfer und J -Homomorphismus. (German) [Relationships between transfer and J -homomorphisms] (82g:57012)
 Vainstein, A. G. (with Gorelik, E. M.; Efremovič, V. A.) On metric foliations. (Russian) (82h:53085)
 Weinstein, Alan D. Fat bundles and symplectic manifolds. (82a:53038)

55Sxx Operations and obstructions

55S05 Primary cohomology operations

secondary classifications:

- Aguadé i Bover, Jaume Cohomology algebras with two generators. (82d:55003)

55S10 Steenrod algebra

- Davis, Donald M. Some quotients of the Steenrod algebra. 82m:55023
 Hardt, Robert M. (with McCrory, Clint G.) Steenrod operations in subanalytic homology. 82b:55019
 McCrory, Clint G. See Hardt, Robert M., 82b:55019
 Miller, Haynes R. (with Wilkerson, Clarence) Vanishing lines for modules over the Steenrod algebra. 82m:55024
 Singer, William M. A new chain complex for the homology of the Steenrod algebra. 82k:55018
 Wilkerson, Clarence See Miller, Haynes R., 82m:55024

secondary classifications:

- Aikawa, Tetsuya 3-dimensional cohomology of the mod p Steenrod algebra. (82g:55023)
 Carlsson, Gunnar Some restrictions on finite groups acting freely on $(S^2)^n$. (82h:55005)
 Kane, Richard M. Operations in connective K -theory. (82m:55025)
 Welcher, Peter J. Symmetric fibre spectra and $K(n)$ -homology acyclicity. (82m:55012)

55S12 Dyer-Lashof operations

- Kono, Akira (with Nagata, Masatsugu) Homology of $(KSC)_n$ over the Dyer-Lashof algebra. 82e:55031

Nagata, Masatsugu On the uniqueness of Dyer-Lashof operations on the Bott periodicity spaces. **82c:55032**
See also **Kono, Akira**, **82c:55031**

55S15 Symmetric products, cyclic products

Wagner, Clifford H. Symmetric, cyclic, and permutation products of manifolds. **82c:55021**

55S20 Secondary and higher cohomology operations

Hegenbarth, Friedrich On a Cartan formula for exotic characteristic classes. I. **82d:55016**
Secondary cohomology operations applied to the Thom class. **82b:55020**

secondary classifications:

Lin, James P. Steenrod squares in the mod 2 cohomology of a finite H -space. **(82g:55007)**

Zabrodsky, A. Some relations in the mod 3 cohomology of H -spaces. **(82a:57040)**

55S25 K -theory operations and generalized cohomology operations

Kane, Richard M. Operations in connective K -theory. **82m:55025**

Yagita, Nobuaki On the Steenrod algebra of Morava K -theory. **82f:55027**

secondary classifications:

Johnson, David Copeland (with Landweber, Peter S.; Yosimura, Zen-ichi) Injective BP, BP-comodules and localizations of Brown-Peterson homology. **(82k:55007)**
Landweber, Peter S. See **Johnson, David Copeland**; et al., **(82k:55007)**
Ochanine, Serge Opérations de Conner-Floyd. (English summary) **(82h:57016)**
Yosimura, Zen-ichi See **Johnson, David Copeland**; et al., **(82k:55007)**

55S30 Massey products

Beitršvili, T. V. On the differentials of a spectral sequence. (Russian. Georgian and English summaries) **82a:55019**

secondary classifications:

Retah, V. S. Massey operations, obstructions to formality in Sullivan's sense and obstructions to Kodaira-Spencer deformations. (Russian) **(82e:32036)**

55S35 Obstruction theory

Félix, Yves (with Tanré, Daniel) Sur la formalité des applications. **82g:55022**

Tanré, Daniel See **Félix, Yves**, **82g:55022**

secondary classifications:

Ku, Hsi Tung (with Ku, Mei Chin) Obstruction theory for finite group actions. **(82m:57024)**

Ku, Mei Chin See **Ku, Hsi Tung**, **(82m:57024)**

55S36 Extension and compression of mappings

55S37 Classification of mappings

secondary classifications:

Félix, Yves (with Tanré, Daniel) Sur la formalité des applications. **(82g:55022)**
Tanré, Daniel See **Félix, Yves**, **(82g:55022)**

55S40 Sectioning fiber spaces and bundles

55S45 Postnikov systems, k -invariants

Huebschmann, Johannes The first k -invariant, Quillen's space BG^+ and the construction of Kan and Thurston. **82c:55033**

secondary classifications:

Larmore, L. L. (with Thomas, Emery) On the fundamental group of a space of sections. **(82h:55014)**

Thomas, Emery See **Larmore, L. L.**, **(82h:55014)**

55S99 None of the above, but in this section

Chisholm, Michael E. k -regular mappings of 2^n -dimensional Euclidean space. **82h:55022**

secondary classifications:

Lansted, Knud On the embedding of coverings into 1-dimensional bundles. **(82c:57010)**
MacDonald, John L. Cohomology operations in a category. **(82c:18009)**
Piacenza, R. J. Cohomology of diagrams and equivariant singular theory. **(82i:55003)**

55Txx Spectral sequences [See also 18G40, 55R20.]

55T05 General

55T10 Serre spectral sequences

Endicott, Patrick C. (with Smith, J. Wolfgang) A homology spectral sequence for submersions. **82a:55028**

Smith, J. Wolfgang See **Endicott, Patrick C.**, **82a:55028**

secondary classifications:

Beitršvili, T. V. On the differentials of a spectral sequence. (Russian. Georgian and English summaries) **(82a:55019)**

55T15 Adams spectral sequences

Aikawa, Tetsuya 3-dimensional cohomology of the mod p Steenrod algebra. **82g:55023**

Bendersky, Martin Some calculations in the unstable Adams-Novikov spectral sequence. **82f:55028**

Davis, Donald M. An infinite family in the cohomology of the Steenrod algebra. **82c:55034**

May, J. P. (with Milgram, R. James) The Bockstein and the Adams spectral sequences. **82c:55019**

Milgram, R. James See **May, J. P.**, **82i:55019**

Miller, Haynes R. On relations between Adams spectral sequences, with an application to the stable homotopy of a Moore space. **82f:55029**

secondary classifications:

Cohen, Ralph L. Odd primary infinite families in stable homotopy theory. **(82d:55011)**

55T20 Eilenberg-Moore spectral sequences [See also 57T35.]

secondary classifications:

Félix, Yves (with Tanré, Daniel) Sur la formalité des applications. **(82g:55022)**

Tanré, Daniel See **Félix, Yves**, **(82g:55022)**

Thomas, Jean-Claude Homotopie rationnelle des fibrés de Serre. (French summary) **(82e:55023)**
Eilenberg-Moore models. (French summary) **(82e:55024)**

55T25 Generalized cohomology

secondary classifications:

Helaja, L. G. Homology of the Whitney sum of fiber spaces. (Russian. Georgian and English summaries) **(82a:55017)**

Šemtan, V. V. The Riemann-Roch theorem and the Atiyah-Hirzebruch spectral sequence. (Russian) **(82e:14028)**

55T99 None of the above, but in this section

Thomason, Robert W. (with Wilson, W. Stephen) Hopf rings in the bar spectral sequence. **82f:55030**

Wilson, W. Stephen See **Thomason, Robert W.**, **82f:55030**

secondary classifications:

Didierjean, Geneviève Groups d'homotopie du monoïde des équivalences d'homotopie fibrées. (English summary) **(82e:55012)**

Schön, Rolf A remark on the Hilton-Roitberg-Zeeman comparison theorem for fibrations. **(82f:55023)**

55Uxx Applied homological algebra and category theory [See also 18Gxx.]

55U05 Abstract complexes

secondary classifications:

Gray, John W. Closed categories, lax limits and homotopy limits. **(82f:18007a)**

55U10 Semisimplicial complexes

Lakser, Harry The homotopy of simplicial algebras. **82c:55035**

Ruiz Salguero, Carlos (with Ruiz Salguero, Roberto) Characterization of the set-theoretical geometric realization in the non-Euclidean case. **82b:55021**

Ruiz Salguero, Roberto See **Ruiz Salguero, Carlos**, **82b:55021**

secondary classifications:

Ruiz Salguero, Roberto Relative subdivisions. (Spanish) **(82c:18012)**

55U15 Chain complexes

secondary classifications:

Farmer, Frank D. Cellular homology for posets. **(82k:18013)**

Lindström, Bernd Matroids on the bases of simple matroids. **(82k:05040)**

55U20 Universal coefficient theorems, Bockstein operator

secondary classifications:

Mitchell, W. J. R. Universal coefficient theorems and a paper of Dinh The Luc. **(82b:18017)**

55U25 Homology of a product, Künneth formula

secondary classifications:

Naidenova, Milka S. Exact sequences of uniform cohomology. (Bulgarian. Russian and English summaries) (82f:55010)

55U30 Duality

secondary classifications:

Puppe, Dieter Duality in monoidal categories and applications to fixed-point theory. (82m:55011)

55U35 Abstract homotopy theory

secondary classifications:

Fritsch, Rudolf (with Latch, Dana May) Homotopy inverses for nerve. (82m:18010)
Latch, Dana May A fibred homotopy equivalence and homology theories for the category of small categories. (82j:55008)

See also Fritsch, Rudolf, (82m:18010)

Thomason, Robert W. Cat as a closed model category. (82b:18005)

55U40 Topological categories

Booth, Peter (with Tillotson, J.) Monoidal closed, Cartesian closed and convenient categories of topological spaces. 82a:55021

Tillotson, J. See Booth, Peter, 82a:55021

55U99 None of the above, but in this section

secondary classifications:

Hubbuck, J. R. A Hopf algebra decomposition theorem. (82d:16008)

57-XX MANIFOLDS AND CELL COMPLEXES (For complex manifolds, see 32C10.)

57-01 Elementary exposition, textbooks

Kosniowski, Czes ★A first course in algebraic topology. 82c:57001

Stillwell, John C. ★Classical topology and combinatorial group theory. 82h:57001

Wilder, Raymond Louis ★Topology of manifolds. 82a:57001

secondary classifications:

Gjiblin, P. J. ★Graphs, surfaces and homology. (82m:55001)

Jäger, Joachim ★Elementare Topologie. (German) [Elementary topology] (82j:54001)

57-02 Advanced exposition (research surveys, monographs, etc.)

secondary classifications:

Ranicki, Andrew ★Exact sequences in the algebraic theory of surgery. (82h:57027)

57-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

Bott, Raoul Marston Morse and his mathematical works. (82b:01037)

(Morse, Marston) See Bott, Raoul, (82b:01037)

Bibliography:

Morse, Marston See Bott, Raoul, (82b:01037)

57-04 Explicit machine computation and programs (not the theory of computation or programming)

Glinert, E. P. (with Katz, Elyahu) Algorithm 40. An algorithm for the integral homology of certain topological groups. 82f:57001

Katz, Elyahu See Glinert, E. P., 82f:57001

secondary classifications:

Bozhityuk, Mehmet Emin On covering spaces of trefoil knot. (Turkish summary) (82h:57004)

57-06 Proceedings, conferences, etc.

Placement problems ★Structure of three-dimensional manifolds and placement problems. (Japanese) 82a:57002

Structure and classification of low-dimensional manifolds ★Structure and classification of low-dimensional manifolds. (Japanese) 82g:57001

Structure of three-dimensional manifolds and placement problems ★Structure of three-dimensional manifolds and placement problems. (Japanese) 82a:57002

Symposium:

Structure and Classification of Low-Dimensional Manifolds ★Structure and classification of low-dimensional manifolds. (Japanese) 82g:57001

Structure of Three-Dimensional Manifolds and Placement Problems ★Structure of three-dimensional manifolds and placement problems. (Japanese) 82a:57002

Three-dimensional manifolds ★Structure of three-dimensional manifolds and placement problems. (Japanese) 82a:57002

secondary classifications:

(Mardesić, Sibe) See Shape theory and geometric topology. (82m:55003)

(Segal, Jack) See Shape theory and geometric topology. (82m:55003)

Conference:

Shape Theory and Geometry Topology ★Shape theory and geometric topology. (82m:55003)

Dubrovnik ★Shape theory and geometric topology. (82m:55003)

Shape theory and geometric topology ★Shape theory and geometric topology.

(82m:55003)

Symposium:

Topology of Infinite Loop Spaces ★Topology of infinite loop spaces. (Japanese) (82a:55001)

Topology of infinite loop spaces ★Topology of infinite loop spaces. (Japanese) (82a:55001)

57Mxx Low-dimensional topology (old 55Axx)

Coldewey, Hans-Dieter See Zieschang, H.; et al., 82h:57002

Vogt, Elmar See Zieschang, H.; et al., 82h:57002

Zieschang, H. (with Vogt, Elmar; Coldewey, Hans-Dieter) ★Surfaces and planar discontinuous groups. 82h:57002

57M05 Fundamental group, presentations, free differential calculus

Kaneto, Takeshi On presentations of the fundamental group of the 3-sphere associated with Heegaard diagrams. 82h:57003

Lomonaco, S. J., Jr. Homology of group systems with applications to low-dimensional topology. 82a:57003

Rassias, George M. Stallings homomorphisms and the simply connectedness problem. 82i:57001

Simon, Jonathan Wirtinger approximations and the knot groups of F^n in S^{n+2} . 82h:57001

secondary classifications:

Howie, James On the fundamental group of an almost-acyclic 2-complex. (82j:57002)

Moran, Siegfried The Alexander matrix of a knot. (82m:57001)

Ratcliffe, John G. On one-relator groups which satisfy Poincaré duality. (82j:20094)

Yanagawa, Takaaki Knot-groups of higher-dimensional ribbon knots. (82h:57020)

Zieschang, H. Decompositions of discrete groups of motions of the plane. (Russian) (82k:20079)

57M10 Covering spaces

Kobelskii, V. L. Certain properties of the homology of spaces covering smooth manifolds. (Russian) 82g:57002

secondary classifications:

Donato, Paul Caractérisation du groupe fondamental d'une variété par l'action transitive du revêtement universel de son groupe de difféomorphismes. (English summary) [Characterization of the fundamental group of a manifold by the transitive action of the universal covering space of its group of diffeomorphisms] (82j:58031)

Jørgensen, Troels (with Marden, A.; Pommerenke, C.) Two examples of covering surfaces. (82k:30048)

Marden, A. See Jørgensen, Troels; et al., (82k:30048)

Pommerenke, C. See Jørgensen, Troels; et al., (82k:30048)

Sadyrhanov, R. S. Covering mappings in domains of normed spaces. (Russian.

Azerbaijani and English summaries) (82f:58014)

Some properties of covering mappings of finite multiplicity and their applications.

(Russian) (82j:54016)

Savel'ev, I. V. Topology of the complex-analytic normalization. (Russian) (82j:32024)

57M12 Special coverings, e.g. branched

Akbulut, Selman (with Kirby, Robion) Branched covers of surfaces in 4-manifolds. 82j:57001

Bozhityuk, Mehmet Emin On covering spaces of trefoil knot. (Turkish summary) 82h:57004

Brand, Neal (with Brumfiel, Gregory) Periodicity phenomena for concordance classes of branched coverings. 82c:57001

Brumfiel, Gregory See Brand, Neal, 82c:57001

Hilden, Hugh M. (with Little, Robert D.) Cobordism of branched covering spaces. 82b:57002

Kirby, Robion See Akbulut, Selman, 82j:57001

Lines, Daniel Revêtements ramifiés. 82c:57002

Little, Robert D. See Hilden, Hugh M., 82b:57002

secondary classifications:

Church, P. T. (with Timourian, J. G.) Deficient points of maps on manifolds. (82a:55007)

Harlamov, V. M. Real algebraic surfaces. (Russian) (82e:14032)

Minda, Carl David The hyperbolic metric and coverings of Riemann surfaces. (82c:30063)

Timourian, J. G. See Church, P. T., (82a:55007)

57M15 Relations with graph theory [See also 05Cxx.]

Bolker, Ethan D. (with Roth, B.) When is a bipartite graph a rigid framework? 82c:57003
 Gagliardi, Carlo Extending the concept of genus to dimension n . 82a:57004
 Roth, B. See Bolker, Ethan D., 82c:57003

secondary classifications:

Dewdney, A. K. (with Harary, Frank) Oriented two-dimensional circuits. (82i:05039)
 Fary, Istvan Une généralisation de la structure abstraite des circuits électriques. (English summary) [A generalization of the abstract structure of electrical circuits] (82j:94028)
 Földes, Stéphane (with Steinberg, Richard) A topological space for which graph embeddability is undecidable. (82d:03073)
 Harary, Frank See Dewdney, A. K., (82i:05039)
 Sarkaria, K. S. On coloring manifolds. (82i:05050)
 Steinberg, Richard See Földes, Stéphane, (82d:03073)

57M20 Two-dimensional complexes

Borsuk, Karol (with Gmurczyk, Anna) On homotopy types of 2-dimensional polyhedra. 82b:57003
 Eckmann, Beno (with Müller, Heinz) Poincaré duality groups of dimension two. 82f:57002
 Gmurczyk, Anna See Borsuk, Karol, 82b:57003
 Gutiérrez, Mauricio A. (with Ratcliffe, John G.) On the second homotopy group. 82g:57003
 Howie, James On the fundamental group of an almost-acyclic 2-complex. 82j:57002
 Jajodia, Sushil Spaces dominated by two-complexes. 82e:57002
 Müller, Heinz See Eckmann, Beno, 82f:57002
 Ratcliffe, John G. See Gutiérrez, Mauricio A., 82g:57003
 Roman, Mark A. On the second homotopy group of certain simplicial complexes and some combinatorial applications. 82f:57003
 Sieradski, Allan J. Framed links for Peiffer identities. 82i:57002

secondary classifications:

Avis, David (with Toussaint, G. T.) An efficient algorithm for decomposing a polygon into star-shaped polygons. (82m:68130)
 Cohen, Marshall M. (with Metzler, W.; Zimmermann, A.) What does a basis of $F(a, b)$ look like? (82m:20028)
 Howie, James On pairs of 2-complexes and systems of equations over groups. (82g:20060)
 Metzler, W. See Cohen, Marshall M.; et al., (82m:20028)
 Toussaint, G. T. See Avis, David, (82m:68130)
 Zimmermann, A. See Cohen, Marshall M.; et al., (82m:20028)

57M25 Knots and links in S^3 [For higher dimensions, see 57Q45.]

Ball, Robin Christopher (with Mehta, M. L.) Sequence of invariants for knots and links. (French summary) 82b:57005
 Boileau, Michel ★Inversibilité des nœuds de Montesinos. (French) [Invertibility of Montesinos knots] 82b:57006
 Giffen, Charles H. Link concordance implies link homotopy. 82a:57005
 Goldsmith, Deborah L. The theory of motion groups. 82b:57007
 Hartley, Richard Knots with free period. 82i:57003
 Hilden, Hugh M. Representations of homology 3-spheres. 82b:57001
 Hillman, Jonathan A. A link with Alexander module free which is not a homology boundary link. 82d:57001
 The Torres conditions are insufficient. 82j:57003
 Jiang, Bo Ju A simple proof that the concordance group of algebraically slice knots is infinitely generated. 82b:57008
 Kauffman, Louis H. Weaving patterns and polynomials. 82b:57004
 Kirkor, Andriy A characterization of unknotted θ -curves of order n . (Russian summary) 82b:57009
 Laudenbach, F. Une remarque sur certains nœuds de $S^1 \times S^2$. 82i:57004
 Litherland, R. A. Surgery on knots in solid tori. II. 82d:57002
 Massey, William S. (with Traldi, Lorenzo) Links with free groups are trivial. 82i:57005
 Mehta, M. L. See Ball, Robin Christopher, 82b:57005
 Moran, Siegfried The Alexander matrix of a knot. 82m:57001
 Murasugi, Kunio On symmetry of knots. 82b:57010
 Nakanishi, Yasutaka Prime links, concordance and Alexander invariants. 82f:57004
 A surgical view of Alexander invariants of links. 82j:57004
 Osborne, Richard P. Knots with Heegaard genus 2 complements are invertible. 82c:57004
 Sato, Nobuyuki Alexander modules of sublinks and an invariant of classical link concordance. 82m:57002
 Shibuya, Tetsuo On the cobordism of compound knots. 82a:57006
 Traldi, Lorenzo See Massey, William S., 82i:57005

secondary classifications:

Amir-Moëz, Ali R. ★String figures—a symbolic approach. (82e:00002)
 Böhme, Reinhold A Plateau problem with many solutions for boundary curves in a given knot class. (82m:58023)
 Fintushel, Ronald (with Stern, Ronald J.) Constructing lens spaces by surgery on knots. (82i:57009a)
 (with Stern, Ronald J.) Correction to: "Constructing lens spaces by surgery on knots". (82i:57009b)
 Grunewald, Fritz J. (with Schwermer, Joachim) Arithmetic quotients of hyperbolic 3-space, cusp forms and link complements. (82j:10046)

Kaplan, Steve J. Constructing framed 4-manifolds with given almost framed boundaries. (82h:57015)

Lê Dũng Tráng Surfaces minimales et singularités. (82f:53009)

Lyon, Herbert C. Incompressible surfaces in the boundary of a handlebody—an algorithm. (82a:57010)

Perron, Bernard Le nœud "huit" est algébrique réel. (English summary) (82f:14005)

Poénaru, V. Quelques rappels sur les difféomorphismes des surfaces. (See 82m:57003)

Schwermer, Joachim A note on link complements and arithmetic groups. (82e:22027)
 See also Grunewald, Fritz J., (82j:10046)

Stern, Ronald J. See Fintushel, Ronald, (82i:57009a) and (82i:57009b)

Takahashi, Moto-o Two-bridge knots have property P. (82f:57010)

Taylor, Herbert Bicycle tubes inside out. (See 82b:00003)

57M30 Wild knots and surfaces, etc., wild imbeddings

57M35 Dehn's Lemma, sphere theorem, loop theorem, asphericity

Brin, Matthew G. Torsion free actions on 1-acyclic manifolds and the loop theorem. 82f:57005

secondary classifications:

Thickstun, T. L. Open acyclic 3-manifolds, a loop theorem and the Poincaré conjecture. (82b:57006)

57M40 Characterizations of E^3 and S^3 (Poincaré conjecture) [See also 57N12.]

Kato, Mitsuyoshi Approaching the Poincaré conjecture. (Japanese) 82g:57004

Moran, Siegfried On a conjecture of Papakyriakopoulos. 82b:57005

Morikawa, Osamu A counterexample to a conjecture of Whitehead. 82b:57011

Swarup, G. Ananda Two reductions of the Poincaré conjecture. 82j:57005

Thickstun, T. L. Open acyclic 3-manifolds, a loop theorem and the Poincaré conjecture. 82b:57006

secondary classifications:

Homma, Tatsuo (with Ochiai, Mitsuyuki; Takahashi, Moto-o) An algorithm for recognizing S^3 in 3-manifolds with Heegaard splittings of genus two. (82i:57013)

Ochiai, Mitsuyuki See Homma, Tatsuo; et al., (82i:57013)

Takahashi, Moto-o See Homma, Tatsuo; et al., (82i:57013)

57M99 None of the above, but in this section

Freedman, Michael Hartley (with Quinn, Frank) A quick proof of the 4-dimensional stable surgery theorem. 82f:57006

(with Quinn, Frank) Slightly singular 4-manifolds. 82f:57007

Johnson, Dennis Conjugacy relations in subgroups of the mapping class group and a group-theoretic description of the Rochlin invariant. 82a:57007

Kawauchi, Akio (with Kojima, Sadayoshi) Algebraic classification of linking pairings on 3-manifolds. 82b:57007

Kojima, Sadayoshi See Kawauchi, Akio, 82b:57007

Quinn, Frank See Freedman, Michael Hartley, 82f:57006 and Hartley, 82f:57007

(Thurston, William) See Travaux de Thurston sur les surfaces, 82m:57003

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Travaux de Thurston sur les surfaces ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] 82m:57003

The works of Thurston on surfaces ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] 82m:57003

secondary classifications:

Abu Osman, M. T. (with Rosenberger, Gerhard) Embedding property of surface groups. (82a:20054)

Asano, Kouhei On one-sided Heegaard splittings and involutions on a class of lens spaces. (82g:57005)

Culler, Marc Using surfaces to solve equations in free groups. (82c:20052)

van Est, Willem T. Sur le groupe fondamental des schémas analytiques de variété à une dimension. (English summary) (82e:57014a)

Erratum: "Sur le groupe fondamental des schémas analytiques de variété à une dimension". (82e:57014b)

Grunewald, Fritz J. See Mennicke, J. L., (82f:57009)

Kaplan, Steve J. Realizing simply connected 4-manifolds by blowing down. (82e:57018)

Kawauchi, Akio On a 4-manifold homology equivalent to a bouquet of surfaces. (82e:57008)

Kra, Irwin On the Nielsen-Thurston-Bers type of some self-maps of Riemann surfaces. (82m:32019)

Lin, V. Ja. Artin braids and related groups and spaces. (Russian) (82b:20047)

Mennicke, J. L. (with Grunewald, Fritz J.) Some 3-manifolds arising from $PSL_2(\mathbb{Z}[i])$. (82f:57009)

Roman, Mark A. Coverings and automorphisms of chamber systems. (82e:51009)

Rosenberger, Gerhard See Abu Osman, M. T., (82a:20054)

Stallings, John R. Topologically unrealizable automorphisms of free groups. (82m:20030)

Stillwell, John C. ★Classical topology and combinatorial group theory. (82b:57001)

Tollefson, Jeffrey L. Involutions of sufficiently large 3-manifolds. (82b:57014)

57Nxx Topological manifolds

57N05 Topology of E^2 , 2-manifolds

- Fathi, Albert (with Laudenbach, F.) Les feuilletages mesurés. (See 82m:57003)
Les feuilletages mesurés (suite). (See 82m:57003)
See also Poénaru, V., (See 82m:57003)
- Gilman, Jane On the Nielsen type and the classification for the mapping class group. 82i:57006
- Harvey, W. J. Geometric structure of surface mapping class groups. 82h:57012
- Johnson, Dennis An abelian quotient of the mapping class group \mathcal{M}_g . 82a:57008
- Kaul, Saroop K. (with Thompson, Dale V.) On a theorem of Nielsen. 82i:57007
- Kulkarni, Ravindra S. (with Shalen, Peter B.) A note on real cubic surfaces. 82d:57003
Compact surfaces as complete intersections. 82d:57004
- Lanteri, Antonio (with Struppa, Daniele) Degenerations of compact orientable surfaces and their classification. (Italian summary) 82i:57008
- Laudenbach, F. La théorie de Thurston sur les surfaces a bord. (See 82m:57003)
See also Fathi, Albert, (See 82m:57003)
- Lee, J. P. Isotopy groups of 2-sphere with boundary holes. 82a:57009
- Malgoire, J. (with Voisin, C.) Factorisation de Stein topologique; découpe. 82h:57013
- Meyerson, Mark D. Equilateral triangles and continuous curves. 82m:57004
- Poénaru, V. Présentation d'ensemble des théorèmes de Thurston sur les surfaces. (See 82m:57003)
Quelques rappels sur les difféomorphismes des surfaces. (See 82m:57003)
L'espace des courbes simples fermées sur une surface. (See 82m:57003)
See also Fathi, Albert; et al., (See 82m:57003)
- Shalen, Peter B. See Kulkarni, Ravindra S., 82d:57003
- Struppa, Daniele See Lanteri, Antonio, 82i:57008
- Taylor, Herbert Bicycle tubes inside out. (See 82h:00003)
- Thompson, Dale V. See Kaul, Saroop K., 82i:57007
- Tukia, Pekka The planar Schönflies theorem for Lipschitz maps. 82e:57003
- Voisin, C. See Malgoire, J., 82h:57013

secondary classifications:

- Abikoff, William ★The real analytic theory of Teichmüller space. (82a:32028)
- Douady, Adrien L'espace de Teichmüller. (See 82m:57003)
- Dyer, Joan L. (with Grossman, Edna K.) The automorphism groups of the braid groups. (82m:20041)
- Fathi, Albert (with Laudenbach, F.) Comment Thurston compactifie l'espace de Teichmüller. (See 82m:57003)
(with Shub, Michael) Some dynamics of pseudo-Anosov diffeomorphisms. (See 82m:57003)
(with Poénaru, V.) Théorèmes d'unicité des difféomorphismes pseudo-Anosov. (See 82m:57003)
- Gandini Zucco, Andreana Sur la multiplicité par rapport à une famille continue de courbes. (Italian summary) (82i:52006)
- Grossman, Edna K. See Dyer, Joan L., (82m:20041)
- Harzheim, Egbert Zerlegungssätze für abgeschwächt injektive Abbildungen. (82b:55005)
- Kušner, B. A. Some topological properties of plane constructive curves. (Russian) (82k:03096)
- Laudenbach, F. Construction de difféomorphismes pseudo-Anosov. (See 82m:57003)
See also Fathi, Albert, (See 82m:57003)
- Meres, Lucjan Some properties of G_2 type sets in two-dimensional Euclidean space. (Polish, Russian and English summaries) (82g:54012)
- Poénaru, V. Rappels de géométrie hyperbolique en dimension 2 et généralités sur $i: \mathbb{S} \times \mathbb{S} \rightarrow \mathbb{R}_+$. (See 82m:57003)
Classification des difféomorphismes des surfaces. (See 82m:57003)
See also Fathi, Albert, (See 82m:57003)
- Rudin, Walter Totally real Klein bottles in \mathbb{C}^2 . (82i:32012)
- Serkuzier, M. The analytic nonbendability of surfaces fastened along a curve on the surface relative to a point and a plane. (Russian) (82h:53006)
- Shub, Michael See Fathi, Albert, (See 82m:57003)
- Strebel, Ralph On one-relator soluble groups. (82e:20041)
- Wason, Judith C. On infinite Nielsen kernels. (82i:30063)

57N10 Topology of general 3-manifolds [See also 57Mxx.]

- Asano, Kouhei On one-sided Heegaard splittings and involutions on a class of lens spaces. 82g:57005
- Fintushel, Ronald (with Stern, Ronald J.) Constructing lens spaces by surgery on knots. 82i:57009a
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- Fried, David Fibrations over S^1 with pseudo-Anosov monodromy. (See 82m:57003)
- Grunewald, Fritz J. See Mennicke, J. L., 82i:57009
- Ivanov, N. V. Corrections: "Homotopies of automorphism spaces of some three-dimensional manifolds" [Dokl. Akad. Nauk SSSR 244 (1979), no. 2, 274-277; MR 80k:57015]. (Russian) 82i:57010
- Johannson, Klaus ★Homotopy equivalences of 3-manifolds with boundaries. 82e:57005
- Kaneto, Takeshi A note on an example of Birman-Montesinos. 82k:57003
- Kim, Hayon (with Kim, Jephil) Fiberwise PL involutions of fibered 3-manifolds. 82i:57008
(with Kim, Jephil; Kwun, Kyung Whan) Algebraic determination of fiberwise PL involutions. 82i:57006
- Kim, Jephil See Kim, Hayon, 82i:57008 and 82i:57006
- Kwun, Kyung Whan See Kim, Hayon; et al., 82i:57006
- Lyon, Herbert C. Incompressible surfaces in the boundary of a handlebody—an algorithm. 82a:57010
- Matveev, S. V. See Zillberg, A. L., 82k:57004

- Mennicke, J. L. (with Grunewald, Fritz J.) Some 3-manifolds arising from $PSL_2(\mathbb{Z}/l\mathbb{Z})$. 82i:57009
- Milnor, John Hyperbolic geometry: the first 150 years. 82m:57005
- Rassias, George M. Remarks on Heegaard splittings and the Poincaré conjecture. (Greek summary) 82c:57006
- Raymond, Frank (with Vasquez, Alphonse T.) 3-manifolds whose universal coverings are Lie groups. 82i:57011
- Stern, Ronald J. See Fintushel, Ronald, 82i:57009
- Swarup, G. Ananda Two finiteness properties in 3-manifolds. 82c:57007
- Takahashi, Moto-o Two-bridge knots have property P. 82i:57010
- Tollefson, Jeffrey L. Involutions of sufficiently large 3-manifolds. 82h:57014
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- Wielenberg, Norbert J. Hyperbolic 3-manifolds which share a fundamental polyhedron. 82i:57012
- Zillberg, A. L. (with Matveev, S. V.) Relations in the homeotopy group of a handlebody and the ribbon braid group. (Russian) 82k:57004

secondary classifications:

- Borel, A. Commensurability classes and volumes of hyperbolic 3-manifolds. (82j:22008)
- Brin, Matthew G. Generalized 3-manifolds whose nonmanifold set has neighborhoods bounded by tori. (82d:57007)
- Hilden, Hugh M. Representations of homology 3-spheres. (82k:57001)
- Jehle, Herbert Topological characterization of leptons, quarks and hadrons. (82i:81152)
- Kaplan, Steve J. Constructing framed 4-manifolds with given almost framed boundaries. (82h:57015)
- Rassias, George M. Stallings homomorphisms and the simply connectedness problem. (82i:57001)
Morse functions on compact differentiable manifolds. (82k:57023)

57N12 Topology of E^3 and S^3 [See also 57M40.]

- Homma, Tatsuo (with Ochiai, Mitsuyuki; Takahashi, Moto-o) An algorithm for recognizing S^3 in 3-manifolds with Heegaard splittings of genus two. 82i:57013
- Ochiai, Mitsuyuki See Homma, Tatsuo; et al., 82i:57013
- Starbird, Michael Null sequence cellular decompositions of S^3 . 82j:57007
- Takahashi, Moto-o See Homma, Tatsuo; et al., 82i:57013

secondary classifications:

- (Birman, Joan S.) See Seifert, Herbert; et al., (82b:55001)
- (Goldman, Michael A.) See Seifert, Herbert; et al., (82b:55001)
- Harzheim, Egbert Zerlegungssätze für abgeschwächt injektive Abbildungen. (82b:55005)
- (Heil, Wolfgang) See Seifert, Herbert; et al., (82b:55001)
- Kaneto, Takeshi On presentations of the fundamental group of the 3-sphere associated with Heegaard diagrams. (82h:57003)
- McAuley, Louis F. (with Woodruff, Edythe P.) Certain point-like decompositions of E^3 with 1-dimensional images of nondegenerate elements. (82h:54013)
- Seifert, Herbert (with Threlfall, William) ★Seifert and Threlfall: a textbook of topology. (82b:55001)
- Threlfall, William See Seifert, Herbert, (82b:55001)
- Woodruff, Edythe P. Decompositions of S^3 which are weakly definable by crumpled cubes. (82g:54014)
See also McAuley, Louis F., (82h:54013)

57N13 Topology of E^4 , 4-manifolds [See also 14Jxx, 32Jxx.]

- Kaplan, Steve J. Constructing framed 4-manifolds with given almost framed boundaries. 82h:57015
- Maruyama, Noriko Rational homology 3-spheres which bound rationally acyclic 4-manifolds. 82k:57005

57N15 Topology of E^n , n -manifolds ($4 < n < \infty$)

- Bass, Charles D. Squeezing m -cells to $(m-1)$ -cells in E^n . 82a:57011
Some products of topological spaces which are manifolds. 82a:57012
- Bognár, M. i -categories and homology. 82d:57005
- Cannon, J. W. The characterization of topological manifolds of dimension $n \geq 5$. 82i:57011
(with Daverman, Robert J.) Cell-like decompositions arising from mismatched sewings: applications to 4-manifolds. 82m:57007
(with Daverman, Robert J.) A totally wild flow. 82m:57006
- Chapman, T. A. Approximating maps into fiber bundles by homeomorphisms. 82k:57006
- Daverman, Robert J. Detecting the disjoint disks property. 82k:57007
See also Cannon, J. W., 82m:57006 and 82m:57007
- Ferri, Massimo (with Gagliardi, Carlo) Strong ball coverings of manifolds. (Italian summary) 82h:57016
- Gagliardi, Carlo See Ferri, Massimo, 82h:57016
- Ikedai, Hiroshi (with Yamashita, Masakatsu) Closed 4-manifolds covered by three 4-balls. 82a:57013
- Kas, A. On the handlebody decomposition associated to a Lefschetz fibration. 82i:57012
- Kuga, Ken'ichi Products of homology manifolds. 82c:57008
- Kulkarni, Ravindra S. (with Wood, John W.) Topology of nonsingular complex hypersurfaces. 82j:57008
- Libgober, Anatoly (with Wood, John W.; Zagier, Don) Congruences modulo powers of 2 for the signature of complete intersections. 82j:57009
- Moran, Daniel A. Computations with spines. (Russian summary) 82k:57008
- Quinn, Frank Ends of maps. I. 82c:57009
- Venema, Gerard A. Neighborhoods of compacta in Euclidean space. 82d:57006
- Weintraub, Steven H. A note on doubles of 4-manifolds. 82e:57004

Wood, John W. See Kulkarni, Ravindra S., 82j:57008 and Libgober, Anatoly; et al., 82j:57009

Yamashita, Masakatsu See Ikeda, Hiroshi, 82a:57013

Zagier, Don See Libgober, Anatoly; et al., 82j:57009

secondary classifications:

Akbulut, Selman (with Kirby, Robion) Branched covers of surfaces in 4-manifolds. (82j:57001)

Chapman, T. A. Proper fibrations with n -manifold fibers. (82e:55027)

Freedman, Michael Hartley (with Quinn, Frank) Slightly singular 4-manifolds. (82j:57007)

Harzheim, Egbert Zerlegungssätze für abgeschwächt injektive Abbildungen. (82b:55005)

Kato, Mitsuyoshi Approaching the Poincaré conjecture. (Japanese) (82g:57004)

Kirby, Robion See Akbulut, Selman, (82j:57001)

McGavran, Dennis Adjacent connected sums and torus actions. (82c:57026)

Meyerson, Mark D. Equilateral triangles and continuous curves. (82m:57004)

Quinn, Frank See Freedman, Michael Hartley, (82j:57007)

Wagner, Clifford H. Symmetric, cyclic, and permutation products of manifolds. (82h:55021)

Xin, Y. L. Topology of certain submanifolds in the Euclidean sphere. (82e:58036)

57N17 Topology of topological vector spaces

secondary classifications:

Mankiewicz, P. (with Vilimovský, Jiří) A remark on uniform classification of boundedly compact linear topological spaces. (82g:46009)

Vilimovský, Jiří See Mankiewicz, P., (82g:46009)

57N20 Topology of infinite-dimensional manifolds [See also 58Bxx.]

Čerin, Zvonko On cellular decompositions of Hilbert cube manifolds. 82i:57014

Chapman, T. A. Approximation results in Hilbert cube manifolds. 82g:57006

★Лекции о Q -многообразиях. (Russian) [Lectures on Hilbert cube manifolds] 82m:57008

Daverman, Robert J. Infinite inflations of crumpled cubes. 82c:57009

Dobrowolski, Tadeusz (with Toruńczyk, Henryk) On metric linear spaces homeomorphic to I_2 and compact convex sets homeomorphic to Q . (Russian summary) 82j:57010

(Fedorčuk, V. V.) See Chapman, T. A., 82m:57008

(Filippov, V. V.) See Chapman, T. A., 82m:57008

(Geoghegan, Ross) See Problems: Infinite-dimensional topology, 82a:57015

Heisey, R. E. (with Toruńczyk, Henryk) On the topology of direct limits of ANRs. 82k:57010

Jakobsche, Włodzimierz The space of homeomorphisms of a 2-dimensional polyhedron is an I_2 -manifold. (Russian summary) 82m:57009

Sakai, Katsuro The space of retractions of a compact Q -manifold is an I^2 -manifold. 82j:57011

Images of I_2 -manifolds under approximate fibrations. 82h:57017

Toruńczyk, Henryk No infinite-dimensional locally compact ANR is a topological group. 82a:57014

Characterizations of infinite-dimensional manifolds. (Polish) 82i:57015

Characterizing Hilbert space topology. 82i:57016

See also Dobrowolski, Tadeusz, 82j:57010 and Heisey, R. E., 82k:57010

Vo Thanh Liem An unknotting theorem in Q^∞ -manifolds. 82j:57012

An α -approximation theorem for Q^∞ -manifolds. 82k:57011

Problems:

Infinite-dimensional topology Open problems in infinite-dimensional topology. 82a:57015

secondary classifications:

Assouad, Patrice Plongements lipschitziens dans un espace pentagonal. (82i:58009)

Chapman, T. A. Approximating maps into fiber bundles by homeomorphisms. (82k:57006)

Proper fibrations with Hilbert cube manifold fibers. (82e:55028)

Fedorčuk, V. V. Covariant functors in a category of compacta, absolute retracts and Q -manifolds. (Russian) (82j:54013)

Ferry, Steve A stable converse to the Vietoris-Smale theorem with applications to shape theory. (82c:55018)

Gutman, S. M. Homeomorphisms of nonseparable B -spaces. II. (Russian) (82e:46024)

Himšiasvili, G. N. The possibility of deleting the projective subsets of Banach spaces by étale diffeomorphisms. (Russian. English and Georgian summaries) (82m:57017)

Ivanov, A. V. Superextensions of metrizable continua and Cantor's discontinuum. (Russian) (82i:54066)

Mardesić, Vera On the homogeneity of the Tychonoff cube. (82h:54008)

Michael, Mark Some hyperspaces homeomorphic to separable Hilbert space. (82j:54012)

van Mill, Jan A rigid space X for which $X \times X$ is homogeneous; an application of infinite-dimensional topology. (82h:54067)

57N25 Shapes [See also 54C56, 54F43, 55P55, 55Q07.]

Ivanšić, I. (with Sher, R. B.) A complement theorem for continua in a manifold. 82b:57008

(with Sher, R. B.; Venema, Gerard A.) Complement theorems beyond the trivial range. 82i:57017

Sher, R. B. See Ivanšić, I., 82b:57008 and 82i:57017

Venema, Gerard A. See Ivanšić, I.; et al., 82i:57017

secondary classifications:

Borsuk, Karol (with Dydak, Jerzy) What is the theory of shape? (82a:54015)

Dydak, Jerzy See Borsuk, Karol, (82a:54015)

Edwards, David A. (with Hastings, Harold M.) Čech theory: its past, present, and future. (82b:55010)

Hastings, Harold M. See Edwards, David A., (82b:55010)

Kalinin, V. A. Extension of embeddings and homeomorphisms of subsets of the Tihonov cube. (Russian) (82k:54022)

Venema, Gerard A. Neighborhoods of compacta in Euclidean space. (82d:57006)

57N30 Engulfing

secondary classifications:

Ivanšić, I. (with Sher, R. B.; Venema, Gerard A.) Complement theorems beyond the trivial range. (82i:57017)

Sher, R. B. See Ivanšić, I.; et al., (82i:57017)

Venema, Gerard A. See Ivanšić, I.; et al., (82i:57017)

57N35 Imbeddings and immersions

Lønsted, Knud On the embedding of coverings into 1-dimensional bundles. 82c:57010

secondary classifications:

Assouad, Patrice Plongements lipschitziens dans un espace pentagonal. (82i:58009)

Daverman, Robert J. Infinite inflations of crumpled cubes. (82c:57009)

Filotti, I. S. An algorithm for imbedding cubic graphs in the torus. (82b:05060)

Gauld, David B. Lipschitz and quasiconformal tubular neighbourhoods of spheres in codimension two. (82b:57009)

Lewis, Wayne Embeddings of the pseudo-arc in E^2 . (82h:54056)

Petit, Jean-Pierre Le modèle central fermé de Bernard Morin. (English summary) (82f:57023)

Tukia, Pekka The planar Schönflies theorem for Lipschitz maps. (82c:57003)

57N37 Isotopy and pseudo-isotopy

Francis, George K. (with Morin, Bernard) Arnold Shapiro's eversion of the sphere. 82j:57013

Morin, Bernard See Francis, George K., 82j:57013

secondary classifications:

Fathi, Albert (with Shub, Michael) Some dynamics of pseudo-Anosov diffeomorphisms. (See 82j:57003)

See also Poénaru, V., (See 82m:57003)

Ivanov, N. V. Corrections: "Homotopies of automorphism spaces of some three-dimensional manifolds" [Dokl. Akad. Nauk SSSR 244 (1979), no. 2, 274-277; MR 80k:57015]. (Russian) (82i:57010)

Lee, J. P. Isotopy groups of 2-sphere with boundary holes. (82a:57009)

McCullough, Darryl Connected sums of aspherical manifolds. (82e:55013a)

The group of homotopy equivalences for a connected sum of closed aspherical manifolds. (82e:55013b)

Petit, Jean-Pierre Le modèle central fermé de Bernard Morin. (English summary) (82f:57023)

Poénaru, V. L'espace des courbes simples fermées sur une surface. (See 82m:57003)

Shub, Michael See Fathi, Albert, (See 82m:57003)

Vo Thanh Liem An unknotting theorem in Q^∞ -manifolds. (82j:57012)

57N40 Neighborhoods of submanifolds

Gauld, David B. Lipschitz and quasiconformal tubular neighbourhoods of spheres in codimension two. 82b:57009

secondary classifications:

Brand, Neal (with Brumfiel, Gregory) Periodicity phenomena for concordance classes of branched coverings. (82e:57001)

Brumfiel, Gregory See Brand, Neal, (82e:57001)

57N45 Flatness and tameness

Daverman, Robert J. (with Loveland, L. D.) Any 2-sphere in E^3 with uniform interior tangent balls is flat. 82c:57005

(with Loveland, L. D.) Wildness and flatness of codimension one spheres having double tangent balls. 82m:57010

Garza, Gene G. Weakly flat curves. 82j:57014

Loveland, L. D. See Daverman, Robert J., 82c:57005 and 82m:57010

secondary classifications:

Campano, J. W. The characterization of topological manifolds of dimension $n \geq 5$. (82f:57011)

Väisälä, Jussi Quasisymmetric embeddings in Euclidean spaces. (82i:30031)

Venema, Gerard A. Approximating topological surfaces in 4-manifolds. (82i:57022)

57N50 $S^{n-1} \subset E^n$, Schoenflies problem

Gauld, David B. The relative Schoenflies theorem. 82f:57013

secondary classifications:

Tukia, Pekka The planar Schönflies theorem for Lipschitz maps. (82c:57003)

57N55 Microbundles and block bundles [See also 55R60, 57Q50.]

57N60 Cellularity

Doyle, P. H. A criterion for the noncellularity of arcs. (82f:57014)

Heath, Jo W. (with Kozłowski, George) Refinable maps on ANR's. (82a:57016)

Kozłowski, George See Heath, Jo W., (82a:57016)

57N65 Algebraic topology of manifolds

Goresky, R. Mark (with MacPherson, Robert) Intersection homology theory. (82b:57010)

MacPherson, Robert See Goresky, R. Mark, (82b:57010)

Madsen, Ib (with Taylor, Laurence R.; Williams, Bruce) Tangential homotopy equivalences. (82f:57015)

Taylor, Laurence R. See Madsen, Ib; et al., (82f:57015)

Wanderley, Marcus Théorie axiomatique de l'orientation des variétés topologiques à bord. (English summary) (82b:57011)

Williams, Bruce See Madsen, Ib; et al., (82f:57015)

secondary classifications:

Kobelskii, V. L. Certain properties of the homology of spaces covering smooth manifolds. (Russian) (82g:57002)

Mastrogiamomo, Pasquale The cohomology of jet fields and the cohomology of covariant tensor fields on a manifold with a linear connection. (Italian. English summary) (82a:58003)

Mišćenko, A. S. (with Solov'ev, Ju. P.) Representations of Banach algebras and formulas of Hirzebruch type. (Russian) (82f:46059)

Rudjak, Ju. B. On the Thom-Dold isomorphism for nonorientable vector bundles. (Russian) (82b:55018)

Sharma, Banwari Lal Novikov-Hirzebruch formula for topological manifolds. (82j:57024)

Solov'ev, Ju. P. See Miščenko, A. S., (82f:46059)

57N70 Cobordism and concordance

57N75 General position and transversality

secondary classifications:

Sharma, Banwari Lal Novikov-Hirzebruch formula for topological manifolds. (82j:57024)

57N80 Stratifications

secondary classifications:

Goresky, R. Mark Whitney stratified chains and cochains. (82j:58008)

57N99 None of the above, but in this section

secondary classifications:

Daverman, Robert J. (with Row, W. H.) Cell-like 0-dimensional decompositions of S^3 are 4-manifold factors. (82g:54011)

Dress, Andreas W. M. On the classification and generation of two- and higher-dimensional regular patterns. (82i:51023a)

Errata to: "On the classification and generation of two- and higher-dimensional regular patterns". (82i:51023b)

Koumo, Masaharu On expansive homeomorphisms on manifolds. (82j:54057)

Kozłowski, George (with Zenor, Phillip) A differentiable, perfectly normal, nonmetrizable manifold. (82c:58003)

Row, W. H. See Daverman, Robert J., (82g:54011)

Zenor, Phillip See Kozłowski, George, (82c:58003)

57Pxx Generalized manifolds [See also 18F15.]

57P05 Local properties

secondary classifications:

Anderson, Gerald A. Resolutions of generalized polyhedral manifolds. (82g:57007)

Bass, Charles D. Some products of topological spaces which are manifolds. (82a:57012)

Kuga, Ken'ichi Products of homology manifolds. (82c:57008)

57P10 Poincaré duality spaces

Wissemann-Hartmann, Cornelia Spherical fibrations and manifolds. (82c:57006)

secondary classifications:

Brasselet, Jean-Paul Sur les morphismes de dualité. (82k:55002)

Eckmann, Beno (with Müller, Heinz) Poincaré duality groups of dimension two. (82f:57002)

Müller, Heinz See Eckmann, Beno, (82f:57002)

57P99 None of the above, but in this section

Altshuler, Amos (with Brehm, Ulrich) The topological structure of 3-pseudomanifolds. (82f:57016)

Anderson, Gerald A. Surgery on Λ -homology manifolds. (82f:57017)

Brehm, Ulrich See Altshuler, Amos, (82f:57016)

Brin, Matthew G. Generalized 3-manifolds whose nonmanifold set has neighborhoods bounded by tori. (82d:57007)

secondary classifications:

Cannon, J. W. The characterization of topological manifolds of dimension $n \geq 5$. (82i:57011)

Riemer, Rolf-Ingrahm Eine Verallgemeinerung topologischer Mannigfaltigkeiten. (82c:58008)

57Qxx PL-topology

57Q05 The general topology of complexes

Pachner, Udo Über die bistellare Äquivalenz simplizialer Sphären und Polytope. (82i:57018)

secondary classifications:

Connelly, Robert Flexing surfaces. (See 82b:60003)

See also Kuiper, Nicolaas H., (82a:53060)

Ferry, Steve A stable converse to the Vietoris-Smale theorem with applications to shape theory. (82c:55018)

Ichishi, Tatsuro On the Knaster-Kuratowski-Mazurkiewicz-Shapley theorem. (82j:55002)

Kuiper, Nicolaas H. Sphères polyédriques flexibles dans E^3 , d'après Robert Connelly. (82a:53060)

57Q10 Simple homotopy type, Whitehead torsion, Reidemeister-Franz torsion, etc.

Chapman, T. A. Invariance of torsion and the Borsuk conjecture. (82i:57019)

Magura, Bruce A. Nonpositive elements in Whitehead groups. (82b:57018)

Piotnick, Steven P. Vanishing of Whitehead groups for Seifert manifolds with infinite fundamental group. (82i:57020)

secondary classifications:

Ferry, Steve A stable converse to the Vietoris-Smale theorem with applications to shape theory. (82c:55018)

Munkholm, Hans J. Transfer on algebraic K -theory and Whitehead torsion for PL fibrations. (82d:18014)

Sharpe, R. W. On the structure of the Steinberg group $St(\Lambda)$. (82i:20083)

57Q12 Wall finiteness obstruction for CW-complexes

57Q15 Triangulating manifolds

Jungerman, Mark (with Ringel, G.) Minimal triangulations on orientable surfaces. (82b:57012)

Pachner, Udo Untersuchungen über die Dualität zwischen Schnitten und Submannigfaltigkeiten konvexer Polytope und allgemeiner kombinatorischer Mannigfaltigkeiten. (82c:57007)

Ringel, G. See Jungerman, Mark, (82b:57012)

secondary classifications:

Brehm, Ulrich Polyeder mit zehn Ecken vom Geschlecht drei. (82i:52017)

McGavran, Dennis Adjacent connected sums and torus actions. (82c:57026)

Neumann, Walter D. An invariant of plumbed homology spheres. (82j:57033)

Roček, Martin (with Williams, Ruth M.) Quantum Regge calculus. (82i:83034)

Schenzel, Peter On the number of faces of simplicial complexes and the purity of Frobenius. (82k:13022)

Williams, Ruth M. See Roček, Martin, (82i:83034)

Winkler, Peter M. On connectivity of triangulations of manifolds. (82g:05070)

57Q20 Cobordism

57Q25 Comparison of PL-structures: classification, Hauptvermutung

Akbulut, Selman (with King, Henry Churchill) A topological characterization of real algebraic varieties. (82a:57017)

(with Taylor, Laurence R.) A topological resolution theorem. (82a:57018)

King, Henry Churchill See Akbulut, Selman, (82a:57017)

Taylor, Laurence R. See Akbulut, Selman, (82a:57018)

Zubr, A. V. Classification of simply connected, six-dimensional manifolds. (Russian) (82a:57019)

57Q30 Engulfing

57Q35 Imbeddings and immersions

Berrick, A. J. Projective space immersions, bilinear maps and stable homotopy groups of spheres. (82b:57013)

Kato, Mitsuyoshi Normal Euler classes of PL embeddings with isolated singularity. (82d:57008)

Kawauchi, Akio On a 4-manifold homology equivalent to a bouquet of surfaces. (82c:57008)

Price, T. M. Spanning surfaces for projective planes in four space. (82i:57021)

(Stan'ko, M. A.) See Venema, Gerard A., (82d:57009)

Venema, Gerard A. The Whitney method in dimension four. (Russian) (82d:57009)

Approximating topological surfaces in 4-manifolds. **82i:57022**

secondary classifications:

- Bolker, Ethan D.** (with Roth, B.) When is a bipartite graph a rigid framework? **(82c:57003)**
Kearton, C. Obstructions to embedding and isotopy in the metastable range. **(82k:57012)**
Roth, B. See **Bolker, Ethan D.**, **(82c:57003)**
Schulz, Christoph Geschlossene Flächen im Rand des Würfels. **(82c:52012)**

57Q37 Isotopy

- Kearton, C.** Obstructions to embedding and isotopy in the metastable range. **82k:57012**

57Q40 Regular neighborhoods

57Q45 Knots and links (in high dimensions) {For the low-dimensional case, see 57M25.}

- Asano, Kouhei** (with Marumoto, Yoshihiko; Yanagawa, Takaaki) Ribbon knots and ribbon disks. **82d:57010**
Bayer, Eva Factorisation is not unique for higher-dimensional knots. **82i:57023**
DeMeo, Roy E., Jr. Cobordisms of even-dimensional links. **82m:57019**
Farber, M. Š. A type of knot and its complement. (Russian. Azerbaijani and English summaries) **82i:57024**
Gutiérrez, Mauricio A. Concordance and homotopy. I. Fundamental group. **82a:57020**
Hausmann, Jean-Claude Finiteness of isotopy classes of certain knots. **82j:57015**
Hillman, Jonathan A. Blanchfield pairings with squarefree Alexander polynomial. **82i:57025**
Hitt, L. R. (with Sumners, D. W.) Many different disk knots with the same exterior. **82j:57016**
Kanenobu, Taizo 2-knot groups with elements of finite order. **82e:57009**
Kawauchi, Akio (with Matumoto, Takao) An estimate of infinite cyclic coverings and knot theory. **82j:57017**
 On links not cobordant to split links. **82d:57011**
Kearton, C. Factorisation is not unique for 3-knots. **82j:57018**
Marumoto, Yoshihiko See **Asano, Kouhei**; et al., **82d:57010**
Matumoto, Takao See **Kawauchi, Akio**, **82j:57017**
Ratcliffe, John G. On the ends of higher-dimensional knot groups. **82j:57019**
Sato, Nobuyuki Free coverings and modules of boundary links. **82j:57020**
 Algebraic invariants of boundary links. **82j:57021**
Sumners, D. W. See **Hitt, L. R.**, **82j:57016**
Taylor, Laurence R. On the genera of knots. **82m:57011**
Yanagawa, Takaaki Knot-groups of higher-dimensional ribbon knots. **82m:57020**
 See also **Asano, Kouhei**; et al., **82d:57010**
Yoshikawa, Katsuyuki On 2-knot groups with the finite commutator subgroups. **82a:57021**

secondary classifications:

- Liang, Chao Chu** α_n -actions on homotopy spheres. **(82k:57030)**
Libgober, Anatoly Levine's formula in knot theory and quadratic reciprocity law. **(82k:10021)**
Netinskii, V. M. Generalization of the Zeeman-Haefliger theorem on links. (Russian) **(82h:57028)**
Simon, Jonathan Wirtinger approximations and the knot groups of F^n in S^{n+2} . **(82h:57001)**
Vogt, Renate ★Cobordismus von hochzusammenhängenden Knoten. (German) [Cobordism of highly connected knots] **(82c:57016)**

57Q50 Microbundles and block bundles [See also 55R60, 57N55.]

57Q55 Approximations

57Q60 Cobordism and concordance

secondary classifications:

- DeMeo, Roy E., Jr.** Cobordisms of even-dimensional links. **(82h:57019)**

57Q65 General position and transversality

secondary classifications:

- Reinoza, Alfonso** A Sard theorem for generalized equations. (Spanish. English summary) **(82m:58010)**

57Q99 None of the above, but in this section

- Anderson, Gerald A.** Resolutions of generalized polyhedral manifolds. **82g:57007**
Brown, Morton (with Wasserman, Arthur G.) Arithmetic invariants of simplicial complexes. **82c:57011**
Handel, David Some existence and nonexistence theorems for k -regular maps. **82i:57018**
Millett, Kenneth C. Smooth families of knots. **82c:57012**
Wasserman, Arthur G. See **Brown, Morton**, **82c:57011**

secondary classifications:

- Connelly, Robert** Conjectures and open questions in rigidity. **(82a:51009)**
Demaria, Davide Carlo A combinatorial interpretation of the homotopy groups of

polyhedra. (Italian) **(82d:55014)**

- Ferri, Massimo** (with Gagliardi, Carlo) Strong ball coverings of manifolds. (Italian summary) **(82h:57016)**
Gagliardi, Carlo See **Ferri, Massimo**, **(82h:57016)**
Koriyama, Akira Expansiveness on compact piecewise linear manifolds. **(82i:58053)**
Mason, Alice (with Walsh, John J.; Wilson, David C.) Inverse limits which are not hereditarily indecomposable. **(82k:54054)**
Munkholm, Hans J. A chain level transfer homomorphism for PL fibrations. **(82g:55020)**
Penna, Michael A. Euler classes of combinatorial manifolds. **(82i:55018)**
Stone, David A. On the combinatorial Gauss map for C^1 submanifolds of Euclidean space. **(82k:57015)**
Walsh, John J. See **Mason, Alice**; et al., **(82k:54054)**
Wilson, David C. See **Mason, Alice**; et al., **(82k:54054)**

57Rxx Differential topology {For foundational questions of differentiable manifolds, see 58Axx; for infinite-dimensional manifolds, see 58Bxx.}

57R05 Triangulating

secondary classifications:

- Hartle, J. B.** (with Sorkin, Rafael D.) Boundary terms in the action for the Regge calculus. **(82j:83024)**
McGavran, Dennis Adjacent connected sums and torus actions. **(82c:57026)**
Sorkin, Rafael D. See **Hartle, J. B.**, **(82j:83024)**

57R10 Smoothing

- Pedersen, Erik Kjaer** Smoothing H -spaces. II. **82h:57014**

secondary classifications:

- Kearton, C.** Obstructions to embedding and isotopy in the metastable range. **(82k:57012)**

57R12 Smooth approximations

57R15 Specialized structures on manifolds (spin manifolds, frame manifolds, etc.)

- Goldman, William M.** (with Hirsch, Morris W.) Flat bundles with solvable holonomy. **82c:57010**
Hirsch, Morris W. See **Goldman, William M.**, **82c:57010**
Rees, Elmer Framings on hypersurfaces. **82c:57011**

secondary classifications:

- Benedetti, R.** (with Tognoli, Alberto) Approximation theorems in differential topology. II. (Italian. English summary) **(82j:53052)**
Caddeo, Renzo See **Dediu, Sofia**; et al., **(82j:53049)**
Dediu, Mihai See **Dediu, Sofia**; et al., **(82j:53049)**
Dediu, Sofia (with Dediu, Mihai; Caddeo, Renzo) The Vranceanu metric in local coordinates. (Italian. French summary) **(82j:53049)**
Dlubek, Helga (with Friedrich, Thomas) Spektraleigenschaften des Dirac-Operators—die Fundamentallösung seiner Wärmeleitungsgleichung und die Asymptotenentwicklung der Zeta-Funktion. **(82g:58087)**
Friedrich, Thomas See **Dlubek, Helga**, **(82g:58087)**
Gromov, Mikhael L. Curvature, diameter and Betti numbers. **(82k:53062)**
Hennig, J. D. Jet bundles and Weyl geometry. **(82g:83021)**
Kanie, Yukihiko Some Lie algebras of vector fields and their derivations. Case of partially classical type. **(82m:58058)**
Pedersen, Erik Kjaer Smoothing H -spaces. II. **(82h:57014)**
Tognoli, Alberto See **Benedetti, R.**, **(82j:53052)**

57R19 Algebraic topology of manifolds

secondary classifications:

- Ferrari, Aldo** On the homology of a smooth manifold. **(82i:58003)**
Inoue, Hisao (with Yano, Koichi) The Gromov invariant of negatively curved manifolds. **(82k:53091)**
Libgober, Anatoly Some properties of the signature of complete intersections. **(82h:14003)**
Yano, Koichi See **Inoue, Hisao**, **(82k:53091)**

57R20 Characteristic classes and numbers

- Brasselet, Jean-Paul** (with Schwartz, Marie-Hélène) Compléments à l'étude des classes de Chern d'une variété à singularités. **82g:57008**
Chen, Kuo Tsai On the Hopf index theorem and the Hopf invariant. **82c:57012**
Crumeyrolle, Albert Classes caractéristiques principales et secondaires. **82h:57015**
Hsiang, Wu Yi On characteristic classes of compact homogeneous spaces and their applications in compact transformation groups. I. **82j:57022**
Jusin, B. V. Sur les formes $S^{p,q}$ apparaissant dans le calcul combinatoire de la deuxième classe de Pontryaguine par la méthode de Gabrielov, Gel'fand et Losik. (English summary) **82g:57009**
Kamata, Masayoshi (with Maki, Haruo) Note on the relation of γ -classes to characteristic classes. **82c:57013**
Lehmann, Daniel Résidus des connexions à singularités et classes caractéristiques. (English summary) **82j:57023**

Maki, Haruo See Kamata, Masayoshi, 82c:57013

Maxim-Râleanu, Liliana The Weil homomorphism for almost principal fibre bundles. 82k:57013

Mei, Xiang Ming The transgression of Pontrjagin characteristic classes. (Chinese) 82k:57014

Ochanine, Serge Opérations de Conner-Floyd. (English summary) 82b:57016

Schwartz, Marie-Hélène See Brasselet, Jean-Paul, 82g:57008

Sharma, Banwari Lal Novikov-Hirzebruch formula for topological manifolds. 82j:57024

Stone, David A. On the combinatorial Gauss map for C^1 submanifolds of Euclidean space. 82k:57015

Thomas, C. B. Characteristic classes of representations over imaginary quadratic fields. 82b:57017

Yu, Yan Lin Generalization of Hopf's index sum formula. (Chinese) 82m:57012

secondary classifications:

Abe, Naoto Exotic characteristic classes of certain Γ -foliations. (82k:57016)

Borisenko, A. A. Pontrjagin classes of a compact surface in a spherical space. (Russian) (82i:53049)

Ch'eng, Shou Ch'ing Subbundles of the tangent bundle of hypersurface of complex projective space. (82j:32056b)

Chess, Daniel A Poincaré-Hopf type theorem for the de Rham invariant. (82b:57024)

Crumeysolle, Albert Indice d'inertie trilatère et classes de Chern. (82j:53064)

Greub, W. H. Pontrjagin classes and Weyl tensors. (82i:53034)

Hegenbarth, Friedrich On a Cartan formula for exotic characteristic classes. I (82d:55016)

Secondary cohomology operations applied to the Thom class. (82b:55020)

Hurder, Steven On the homotopy and cohomology of the classifying space of Riemannian foliations. (82j:57029)

Kato, Mitsuyoshi Normal Euler classes of PL embeddings with isolated singularity. (82d:57008)

Kikuchi, Shigeki Codimension three immersions up to cobordism. (82a:57025)

Lawson, H. Blaine, Jr. (with Michelsohn, M. L.) Clifford bundles, immersions of manifolds and the vector field problem. (82g:53065)

Lazarov, Connor A permanence theorem for exotic classes. (82b:57021)

Li, Bang He (with Peterson, F. P.) On immersions of k -manifolds in $(2k-1)$ -manifolds. (82k:57022)

Matsushita, Yasuo On Euler characteristics of compact Einstein 4-manifolds of metric signature $(++--)$. (82j:53106)

Inequality for the Euler characteristic of compact Einstein 4-manifolds. (82b:53065)

Michelsohn, M. L. See Lawson, H. Blaine, Jr., (82g:53065)

Moonen, Boudewijn ★Das Lefschetz-Riemann-Roch-Theorem für singuläre Varietäten. (German) [The Lefschetz-Riemann-Roch theorem for singular varieties] (82b:14015)

Nestke, Andreas ★Kohomologie elliptischer Komplexe und die Fixpunktformel von Atiyah-Bott. (German) [Cohomology of elliptic complexes and the fixed-point formula of Atiyah-Bott] (82i:58064)

O'Brian, Nigel R. (with Toledo, Domingo; Tong, Yue Lin L.) The trace map and characteristic classes for coherent sheaves. (82f:32021)

Papastavridis, Stavros Killing rational characteristic classes by surgery. (82a:57028)

Peterson, F. P. See Li, Bang He, (82k:57022)

Picken, R. F. New topological indices in $SO(3)$ Einstein-Yang-Mills theory. (82a:83039)

Piene, Ragni (with Ronga, Felice) A geometric approach to the arithmetic genus of a projective manifold of dimension three. (82e:14027)

Ronga, Felice See Piene, Ragni, (82e:14027)

Toledo, Domingo See O'Brian, Nigel R.; et al., (82f:32021)

Tong, Yue Lin L. See O'Brian, Nigel R.; et al., (82f:32021)

Xin, Y. L. The characteristic numbers of 4-dimensional Kähler manifolds. (82j:53109)

Yuan, Hsi Shih Subbundles of the tangent bundle of complex projective space. (82j:32056a)

57R22 Topology of vector bundles and fiber bundles [See also 55Rxx.]

Koschorke, Ulrich ★Vector fields and other vector bundle morphisms—a singularity approach. 82i:57026

secondary classifications:

Goldman, William M. (with Hirsch, Morris W.) Flat bundles with solvable holonomy. (82e:57010)

Hirsch, Morris W. See Goldman, William M., (82e:57010)

Kafier, Ju. N. The four-dimensional α -model as Yang-Mills theory. (82g:81057)

Kerner, Richard Spinors on fiber bundles. (See 82b:81004)

Millson, John J. Real vector bundles with discrete structure group. (82i:55016)

Ross, Dennis K. Plane waves and topology. (82m:81083)

57R25 Vector fields, frame fields, etc.

Bliznjakov, N. M. Estimates of the rotation of vector fields of algebraic varieties. (Russian) 82c:57013

Leite, Maria Luiza (with de Miatello, Isabel Dotti) Linear vector fields on $\tilde{G}_k(\mathbb{R}^n)$. 82c:57014

de Miatello, Isabel Dotti See Leite, Maria Luiza, 82c:57014

Randall, Duane Remarks on vector fields. 82g:57010

secondary classifications:

Atiyah, Michael F. (with Hitchin, N. J.; Drinfel'd, V. G.; Manin, Ju. I.) Construction of instantons. (82g:81049)

Bendsee, Martin Philip On the existence of observable single-output systems of a simple type. (82f:93014)

Drinfel'd, V. G. See Atiyah, Michael F.; et al., (82g:81049)

Feigin, B. L. (with Fuchs, D. B.) Homology of the Lie algebra of vector fields on the line. (Russian) (82b:17017)

Fuchs, D. B. See Feigin, B. L., (82b:17017)

Hitchin, N. J. See Atiyah, Michael F.; et al., (82g:81049)

Koschorke, Ulrich ★Vector fields and other vector bundle morphisms—a singularity approach. (82i:57026)

Manin, Ju. I. See Atiyah, Michael F.; et al., (82g:81049)

Prasolov, V. V. Linear spaces in the general linear group. (Russian) (82i:15014)

Satanin, A. M. Metastable states of a nonlinear vector field with values on a sphere. (Russian) (82d:58030)

Yu, Yan Lin Generalization of Hopf's index sum formula. (Chinese) (82m:57012)

57R27 Controllability of vector fields on C^∞ and real-analytic manifolds [See also 49E15, 49F15.]

Gronski, Jan M. A criterion for classifying certain planar systems. 82j:57025

Hunt, L. R. Global controllability of nonlinear systems in two dimensions. 82j:57026

Lecomte, Pierre B. A. Sur l'algèbre de Lie des sections d'un fibre en algèbres de Lie. 82b:57021

secondary classifications:

Bonnard, Bernard (with Jurčević, V.; Kupka, Ivan A. K.; Sallet, G.) Systèmes de champs de vecteurs transitsifs sur les groupes de Lie semi-simples et leurs espaces homogènes. (82a:93010)

Boothby, William M. (with Wilson, Edward N.) Determination of the transitivity of bilinear systems. (82m:93003)

Hunt, L. R. Reachable sets for nonlinear systems in the phase plane. (82a:49044)

Jakubczyk, Bronisław Existence and uniqueness of realizations of nonlinear systems. (82e:93053)

Jurčević, V. See Bonnard, Bernard; et al., (82a:93010)

Kupka, Ivan A. K. See Bonnard, Bernard; et al., (82a:93010)

Nijmeijer, Henk ★Controllability distributions for nonlinear control systems. (82m:58046)

Rudenko, A. V. Methods of differential topology in the problem of local controllability. (Russian) (82g:93009)

Representation of simultaneously reachable sets in nonlinear systems. (82m:49052)

Sallet, G. See Bonnard, Bernard; et al., (82a:93010)

Wilson, Edward N. See Boothby, William M., (82m:93003)

57R30 Foliations; geometric theory

Abe, Naoto Exotic characteristic classes of certain Γ -foliations. 82k:57016

Arnoux, Pierre (with Yoccoz, Jean-Christophe) Construction de difféomorphismes pseudo-Anosov. (English summary) 82b:57018

Blumenthal, Robert A. The base-like cohomology of a class of transversely homogeneous foliations. (French summary) 82d:57012

Riemannian homogeneous foliations without holonomy. 82m:57013

Cantwell, John (with Conlon, Lawrence) Poincaré-Bendixson theory for leaves of codimension one. 82f:57019

Caron, P. (with Carrière, Y.) Flots transversalement de Lie. 82d:57013

Carrière, Y. See Caron, P., 82d:57013

Conlon, Lawrence See Cantwell, John, 82f:57019

Duchamp, T. (with Kalka, M.) Deformation theory for holomorphic foliations. 82b:57019

van Est, Willem T. Sur le groupe fondamental des schémas analytiques de variété à une dimension. (English summary) 82e:57014a

Erratum: "Sur le groupe fondamental des schémas analytiques de variété à une dimension". 82e:57014b

Fukui, Kazuhiko On the foliated cobordisms of codimension-one foliated 3-manifolds. (Japanese summary) 82d:57014

Haefliger, André Some remarks on foliations with minimal leaves. 82j:57027

Holmann, Harald On the stability of holomorphic foliations. 82f:57020

Hurder, Steven (with Kamber, F. W.) Homotopy invariants of foliations. 82b:57020

Igošin, V. A. See Šapiro, Ja. L., 82e:57015

Imanishi, Hideki Denjoy-Siegel theory of codimension 1 foliations. (Japanese) 82k:57017

Johnson, David L. (with Naveira, A. M.) A topological obstruction to the geodesibility of a foliation of odd dimension. 82k:57018

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- Goresky, R. Mark. Whitney stratified chains and cochains. **(82j:58008)**
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Field, M. J. Equivariant dynamical systems. (82c:58037)

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Grove, Edward A. (with Hsiang, Wu Yi) Classification of compact homogeneous spaces with nonzero Euler class and with zero Pontrjagin classes. (82c:57027)

Hsiang, Wu Yi On characteristic classes of compact homogeneous spaces and their applications in compact transformation groups. I. (82j:57022)

See also Grove, Edward A., (82c:57027)

Izumiya, Shyūichi On G-extensible regularity condition and Thom-Boardman singularities. (82c:58020)

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Oniščik, A. L. Transitive actions on Borel manifolds. (Russian) (82c:53033)

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Thomas, Jean-Claude Homotopie rationnelle des fibrés de Serre. (French summary) (82c:55023)

Trautman, Andrzej On groups of gauge transformations. (82a:81025)

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secondary classifications:

Curtis, Charles W. Homology representations of finite groups. (82c:20090)

Hauschild, Volker Compact Lie group actions with isotropy subgroups of maximal rank. (82c:57027)

Löffler, Peter Homotopie-lineare Involutions auf Sphären. (82c:57022)

Die Existenz freier Z_2 -Operationen auf rationalen Homologiesphären.

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Myers, Robert Free involutions on lens spaces. (82g:57015)

Segal, Graeme (with Stretch, C. T.) Characteristic classes for permutation representations. (82b:55020)

Stretch, C. T. See Segal, Graeme, (82b:55020)

Thomas, C. B. Classification of free actions by some metacyclic groups on S^{2n-1} . (82g:57016)

57S20 Noncompact Lie groups of transformations

Oniščik, A. L. Correction: "Extensions of transitive transformation groups" [Izv. Vysš. Učebn. Zaved. Matematika 1977, no. 3(178), 53-65; MR 57 #17671]. (Russian) 82c:57029

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secondary classifications:

- Gordon, Carolyn Transitive Riemannian isometry groups with nilpotent radicals. (French summary) (82i:53040)
 Lecomte, Pierre B. A. Sur une équation aux dérivées partielles intervenant dans l'étude des symétries d'espace-temps du champ électromagnétique. (English summary) (82e:53076)
 Lipatov, N. S. Four-dimensional Liouville spaces of intermediate geometric mobilities. (Russian) (82i:53035)

57S25 Groups acting on specific manifolds

- Carlsson, Gunnar On the nonexistence of free actions of elementary abelian groups on products of spheres. 82a:57038
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 Liang, Chao Chu α_p -actions on homotopy spheres. 82k:57030
 Löffler, Peter Homotopielineare Involutionen auf Sphären. 82e:57022
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 Uchida, Fumiichi Real analytic $SL(n, \mathbb{C})$ actions. 82e:57023
 Völklein, Helmut Transitivitätsfragen bei linearen Liegruppen. 82i:57032
 Wang, Kai Torus actions on cohomology complex projective spaces. 82b:57032
 Locally smooth torus group actions on integral cohomology complex projective spaces. 82m:57028

secondary classifications:

- Edmonds, Allan L. Orientability of fixed point sets. (82h:57032)
 Gurjar, R. V. Affine varieties dominated by \mathbb{C}^2 . (82b:14008)
 Kaul, Saroop K. (with Thompson, Dale V.) On a theorem of Nielsen. (82i:57007)
 Kawakubo, Katsuo Cancellation law for G -homotopy equivalent representations. (82h:57029)
 Madsen, Ib Spherical space forms: a survey. (82m:57025)
 Montgomery, Deane (with Yang, Chung Tao) Dihedral group actions. I. (82g:57014)
 Oike, Hiroshi Simply connected closed smooth 5-manifolds with effective smooth $U(2)$ -actions. (82m:57021)
 Petrie, Ted Three theorems in transformation groups. (82b:57031)
 Pjaseckii, V. S. Classification of convex cones of finite type of rank four. (Russian) (82i:32059)
 Suwa, Tatsuo Deformations of holomorphic Seifert fiber spaces. (82m:32024)
 Deformations of holomorphic group actions. (82m:32028)
 Deformations of complex analytic Seifert fibre spaces. (Japanese) (82m:32017)
 Szenthe, J. On maximal invariant neighborhoods of orbits. (82c:57021)
 Thompson, Dale V. See Kaul, Saroop K. (82i:57007)
 Uchida, Fumiichi Real analytic $SL(n, \mathbb{R})$ actions on spheres. (82j:57039)
 Yang, Chung Tao See Montgomery, Deane, (82g:57014)

57S30 Discontinuous groups of transformations

- Nikulin, V. V. On the arithmetic groups generated by reflections in Lobachevskii spaces. (Russian) 82m:57029

secondary classifications:

- Gorjunov, V. V. Cohomology of braid groups of series C and D . (Russian) (82k:20085)
 Komiya, Katsuhiko On the existence of anti-equivariant vector fields on Z_2 -manifolds. (Japanese) (82h:57034)

57S99 None of the above, but in this section

- Laitinen, Erkki Burnside ring and Segal's conjecture. 82m:57030
 Scharlemann, Martin The subgroup of Δ_2 generated by automorphisms of tori. 82a:57039

secondary classifications:

- Abels, Herbert (with Strantzalos, Polychronis) Homogeneous factors of Riemannian manifolds. (82m:53037)
 Bott, Raoul Equivariant Morse theory and the Yang-Mills equation of Riemann surfaces. (82e:58035)
 Dyer, Eldon Some remarks on fixed point theory. (82i:54077)
 Grecu, Eftimie Variétés de Grassmann non compactes. (82h:53068)
 James, I. M. (with Segal, Graeme) On equivariant homotopy theory. (82i:55014)
 Schlichting, G. Operationen mit periodischen Stabilisatoren. (82m:20007)
 Segal, Graeme See James, I. M., (82i:55014)
 Strantzalos, Polychronis See Abels, Herbert, (82m:53037)
 Tataru-Mihai, P. On the instanton solutions for the SU_2 gauge field theory. (Italian and Russian summaries) (82e:81044)

57Txx Homology and homotopy of topological groups and related structures

57T05 Hopf algebras [See also 16A24.]

secondary classifications:

- Kozima, Kazumoto The comodule structure of $K_*(\Omega Sp(n))$. (82b:57033)
 Wilkerson, Clarence The cohomology algebras of finite-dimensional Hopf algebras. (82e:16019)

57T10 Homology and cohomology of Lie groups

- Kozima, Kazumoto The comodule structure of $K_*(\Omega Sp(n))$. 82b:57033

secondary classifications:

- Alperin, Roger C. Homology of $SL_2(\mathbb{Z}[\omega])$. (82f:20070)
 Avrunin, George S. (with Scott, Leonard L.) A Quillen stratification theorem for modules. (82m:20055)
 Dochitjov, Constantin Sur l'algèbre de cohomologie de la variété grassmannienne complexe. (82h:14036)
 Houard, J.-C. An integral formula for cocycles of Lie groups. (82c:22024)
 Scott, Leonard L. See Avrunin, George S., (82m:20055)

57T15 Homology and cohomology of homogeneous spaces of Lie groups

- Grove, Edward A. (with Hsiang, Wu Yi) Classification of compact homogeneous spaces with nonzero Euler class and with zero Pontrjagin classes. 82c:57027
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 Johnson, Francis E. A. Aspherical manifolds of standard linear type. 82m:57031

secondary classifications:

- Ewing, John (with Ljulevicius, Arunas) Homotopy rigidity of linear actions on homogeneous spaces. (82e:57020)
 Hsiang, Wu Yi On characteristic classes of compact homogeneous spaces and their applications in compact transformation groups. I. (82j:57022)
 Ljulevicius, Arunas See Ewing, John, (82e:57020)

57T20 Homotopy groups of topological groups and homogeneous spaces

secondary classifications:

- Gorbacevič, V. V. On the structure of compact homogeneous spaces. (Russian) (82a:53053)

57T25 Homology and cohomology of H -spaces

- Gonçalves, Daciberg Lima The connectivity of a finite H -space. 82g:57017
 Zabrodsky, A. Some relations in the mod 3 cohomology of H -spaces. 82a:57040

secondary classifications:

- Babenko, I. K. Poincaré series of multiple loop spaces. (Russian) (82e:55016)
 Kono, Akira (with Nagata, Masatsugu) Homology of $(KSC)_n$ over the Dyer-Lashof algebra. (82e:55031)
 Nagata, Masatsugu See Kono, Akira, (82e:55031)

57T30 Bar and cobar constructions [See also 18G55, 55Uxx.]

- Kadeišvili, T. V. On the theory of homology of fiber spaces. (Russian) 82a:57041a
 Smirnov, V. A. Homology of fiber spaces. (Russian) 82a:57041b

57T35 Applications of Eilenberg-Moore spectral sequences [See also 55R20, 55T20.]

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57T99 None of the above, but in this section

- Dula, G. (with Katz, Elyahu) Recursion formulas for the homology of $\Omega(X \vee Y)$. 82c:57028
 Katz, Elyahu See Dula, G., 82c:57028

secondary classifications:

- van der Kallen, Wilberd Homology stability for linear groups. (82c:18011)

58-XX GLOBAL ANALYSIS, ANALYSIS ON MANIFOLDS [See also 32Cxx, 32Fxx, 46-XX, 47Hxx, 53Cxx; for geometric integration theory, see 49F20, 49F22.]

58-01 Elementary exposition, textbooks

- (Aron, Richard M.) See Nachbin, Leopoldo, 82i:58002
 Barone, Mário, Jr. See de Mello, Alcília A. H., 82a:58001
 Demazure, Michel ★Calcul différentiel. (French) [Differential calculus] 82i:58001

- Larotonda, Angel Rafael ★Notas sobre variedades diferenciables. (Spanish) [Notes on differentiable manifolds] 82g:58001
- de Mello, Alcilia A. H. (with Barone, Mario, Jr.) ★Equações diferenciais. Uma introdução aos sistemas dinâmicos. (Portuguese) [Differential equations. An introduction to dynamical systems] 82a:58001
- Nachbin, Leopoldo ★Introduction to functional analysis: Banach spaces and differential calculus. 82f:58002

secondary classifications:

- Auer, Jan W. Mathematical preliminaries to elementary catastrophe theory. (82a:58013)
- Bishop, Richard L. (with Goldberg, Samuel I.) ★Tensor analysis on manifolds. (82g:53001)
- Goldberg, Samuel I. See Bishop, Richard L., (82g:53001)
- (Lepa, Eugene) See Maurin, Krzysztof, (82c:00003)
- Maurin, Krzysztof ★Analysis. Part II. (82c:00003)
- Riemenschneider, Oswald Die Katastrophentheorie von René Thom. Versuch einer Einführung. (82h:58019)
- Trenogin, V. A. ★Функциональный анализ. (Russian) [Functional analysis] (82k:46001)

58-02 Advanced exposition (research surveys, monographs, etc.)

- Omori, Hideki ★Mugen jigen ri gunron. (Japanese) [Theory of infinite-dimensional Lie groups] 82k:58001
- Sattinger, D. H. ★Les symétries des équations et leurs applications dans la mécanique et la physique. (French) [The symmetries of equations and their applications in mechanics and physics] 82c:58001

secondary classifications:

- (Gindikin, S. G.) See Guillemin, Victor; et al., (82k:58085)
- Guillemin, Victor (with Sternberg, Shlomo) ★Геометрические асимптотики. (Russian) [Geometric asymptotics] (82k:58085)
- Lamb, George L., Jr. ★Elements of soliton theory. (82f:35165)
- Sternberg, Shlomo See Guillemin, Victor, (82k:58085)

58-03 Historical (must also be assigned at least one classification number from Section 01)

secondary classifications:

- Bott, Raoul Marston Morse and his mathematical works. (82h:01037)
- (Morse, Marston) See Bott, Raoul, (82h:01037)
- Bibliography:
Morse, Marston See Bott, Raoul, (82h:01037)

58-04 Explicit machine computation and programs (not the theory of computation or programming)

- Edelen, Dominic G. B. Programs for computer implementation of the exterior calculus with applications to isovector calculations. 82f:58003

secondary classifications:

- Abraham, Ralph H. Dynasim: exploratory research in bifurcations using interactive computer graphics. (82a:58042)
- Banchoff, Thomas F. Computer animation and the geometry of surfaces in 3- and 4-space. (82h:53002)
- Čencova, N. N. Computer verification of the transverse intersection of separatrices. (Russian) (82k:58079)
- Hassard, Brian D. Computation of invariant manifolds. (82h:58062)
- (with Kazarinoff, Nicholas D.; Wan, Yieh Hei) ★Theory and applications of Hopf bifurcation. (82j:58089)
- Kazarinoff, Nicholas D. See Hassard, Brian D.; et al., (82j:58089)
- Oono, Yoshitsugu (with Takahashi, Yoichiro) Chaos, external noise and Fredholm theory. (82g:58073)
- Reiman, Allan Computer-aided closure of the Lie algebra associated with a nonlinear partial differential equation. (82j:58006)
- Simó, Carlos Some experiments with planar maps: strange attractors, stable zones and the role of invariant manifolds. (82g:58048)
- Takahashi, Yoichiro See Oono, Yoshitsugu, (82g:58073)
- Wan, Yieh Hei See Hassard, Brian D.; et al., (82j:58089)
- Zabusky, Norman J. Computational synergetics and mathematical innovation. (82m:00029)

58-06 Proceedings, conferences, etc.

- (Attea, M.) See Nonlinear problems of analysis in geometry and mechanics. 82d:00005
- (Bancel, Daniel) See Nonlinear problems of analysis in geometry and mechanics. 82d:00005
- (Černavskii, A. V.) See Geometric methods in problems of algebra and analysis. 82d:00004
- (Chern, Shing Shen) See Symposium: Chern, Differential Geometry. 82c:58002
- (Devaney, Robert L.) See Classical mechanics and dynamical systems. 82a:58002
- (Faddeev, L. D.) See Differential geometry, Lie groups and mechanics. 82a:58002
- (Gumowski, I.) See Nonlinear problems of analysis in geometry and mechanics. 82d:00005
- (Hsiang, Wu Yi) See Symposium: Chern, Differential Geometry. 82c:58002
- (Kobayashi, Shoshichi) See Symposium: Chern, Differential Geometry. 82c:58002
- (Nitecki, Zbigniew H.) See Classical mechanics and dynamical systems. 82a:58002
- (Singer, I. M.) See Symposium: Chern, Differential Geometry. 82c:58002

- (Weinstein, Alan D.) See Symposium: Chern, Differential Geometry. 82c:58002
- (Wolf, Joseph Albert) See Symposium: Chern, Differential Geometry. 82c:58002
- (Wu, Hung Hsi) See Symposium: Chern, Differential Geometry. 82c:58002
- Algebra ★Геометрические методы в задачах алгебры и анализа. Вып. 2. (Russian) [Geometric methods in problems of algebra and analysis. No. 2] 82d:00004
- Analyse sur les variétés ★Analyse sur les variétés. (French) [Analysis on manifolds] 82c:58001
- Analysis ★Геометрические методы в задачах алгебры и анализа. Вып. 2. (Russian) [Geometric methods in problems of algebra and analysis. No. 2] 82d:00004
- Analysis on manifolds ★Analyse sur les variétés. (French) [Analysis on manifolds] 82c:58001
- Berkeley, Calif. ★The Chern Symposium 1979. 82c:58002
- Classical mechanics and dynamical systems ★Classical mechanics and dynamical systems. 82k:58002
- Conference:
Analysis on Manifolds ★Analyse sur les variétés. (French) [Analysis on manifolds] 82c:58001
- Nonlinear Problems in Geometry ★Nonlinear problems in geometry. 82j:58001
- NSF-CBMS Regional, Recent Developments in Celestial Mechanics ★Classical mechanics and dynamical systems. 82k:58002
- Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) 82h:58001
- Differential equations ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) 82h:58001
- Differential geometry ★The Chern Symposium 1979. 82c:58002
- Differential geometry, Lie groups and mechanics ★Дифференциальная геометрия, группы Ли и механика. III. (Russian) [Differential geometry, Lie groups and mechanics. III] 82a:58002
- Function theory ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) 82h:58001
- Geometric methods in problems of algebra and analysis ★Геометрические методы в задачах алгебры и анализа. Вып. 2. (Russian) [Geometric methods in problems of algebra and analysis. No. 2] 82d:00004
- Geometry ★Nonlinear problems in geometry. 82j:58001
- ★Nonlinear problems of analysis in geometry and mechanics. 82d:00005
- Katata ★Nonlinear problems in geometry. 82j:58001
- Lie groups ★Дифференциальная геометрия, группы Ли и механика. III. (Russian) [Differential geometry, Lie groups and mechanics. III] 82a:58002
- Mechanics ★Дифференциальная геометрия, группы Ли и механика. III. (Russian) [Differential geometry, Lie groups and mechanics. III] 82a:58002
- ★Nonlinear problems of analysis in geometry and mechanics. 82d:00005
- Medford, Mass. ★Classical mechanics and dynamical systems. 82k:58002
- Metz ★Analyse sur les variétés. (French) [Analysis on manifolds] 82c:58001
- Nonlinear problems of analysis in geometry and mechanics ★Nonlinear problems of analysis in geometry and mechanics. 82d:00005
- Nonlinear problems in geometry ★Nonlinear problems in geometry. 82j:58001
- Problems:
Geometry ★Nonlinear problems in geometry. 82j:58001
- Singularities of differentiable mappings ★Singularities of differentiable mappings. (Japanese) 82c:58001
- Symposium:
Chern, Differential Geometry ★The Chern Symposium 1979. 82c:58002
- Deformation Theory of Linear Differential Equations and a New Viewpoint for Extension of Abelian Function Theory ★Deformation theory of linear differential equations and a new viewpoint for extension of abelian function theory. (Japanese) 82h:58001
- Division of Mathematics of the Taniguchi Foundation ★Nonlinear problems in geometry. 82j:58001
- Problems in Nonlinear Analysis in Geometry and Mechanics ★Nonlinear problems of analysis in geometry and mechanics. 82d:00005
- Singularities of Differentiable Mappings ★Singularities of differentiable mappings. (Japanese) 82c:58001
- Toulouse ★Nonlinear problems of analysis in geometry and mechanics. 82d:00005
- secondary classifications:
- (Gähler, Siegfried) See Convergence structures and applications to analysis. (82d:46001)
- (Gähler, Werner) See Convergence structures and applications to analysis. (82d:46001)
- (Gamkrelidze, R. V.) See Current problems in mathematics. (82m:81002)
- (Garnir, H. G.) See Singularities in boundary value problems. (82i:35005)
- (Garrido, Luis) See Systems far from equilibrium. (82g:82004)
- (Kneis, Gert) See Convergence structures and applications to analysis. (82d:46001)
- (Kukhtenko, O. I.) See Complex control systems. (82a:93005)
- (Lebedev, D. V.) See Complex control systems. (82a:93005)
- (Ostianu, N. M.) See Problems in geometry. (82h:53002)
- (Sibirskii, K. S.) See All-Union Conference: Qualitative Theory of Differential Equations. (82d:34002)
- All-Union Conference:
Qualitative Theory of Differential Equations ★V Всесоюзная Конференция по Качественной Теории Дифференциальных Уравнений. (Russian) [Fifth All-Union Conference on Qualitative Theory of Differential Equations] (82d:34002)
- Barcelona ★Systems far from equilibrium. (82g:82004)
- Boundary value problems ★Singularities in boundary value problems. (82i:35005)
- Complex control systems ★Сложные системы управления. (Russian) [Complex control systems] (82a:93005)
- Conference:
Stites, Statistical Mechanics ★Systems far from equilibrium. (82g:82004)
- Control systems ★Сложные системы управления. (Russian) [Complex control systems] (82a:93005)

- Convergence structures and applications to analysis** ★Convergence structures and applications to analysis. (82d:46001)
- Current problems in mathematics** ★Современные проблемы математики. Том 17. (Russian) [Current problems in mathematics. Vol. 17] (82m:81002)
- Differential equations** ★V Всесоюзная Конференция по Качественной Теории Дифференциальных Уравнений. (Russian) [Fifth All-Union Conference on Qualitative Theory of Differential Equations] (82d:34002)
- Frankfurt a.d. Oder** ★Convergence structures and applications to analysis. (82d:46001)
- Itoji Nanki i Tehniki** ★Проблемы геометрии. Том 12. (Russian) [Problems in geometry. Vol. 12] (82h:53002)
- ★Современные проблемы математики. Том 17. (Russian) [Current problems in mathematics. Vol. 17] (82m:81002)
- Linear differential equations** ★Microfunctions and linear differential equations. VII. (Japanese) (82d:46002)
- Maratea** ★Singularities in boundary value problems. (82i:35005)
- Microfunctions and linear differential equations** ★Microfunctions and linear differential equations. VII. (Japanese) (82d:46002)
- NATO Advanced Study Institute:**
- Singularities in Boundary Value Problems** ★Singularities in boundary value problems. (82i:35005)
- Problems in geometry** ★Проблемы геометрии. Том 12. (Russian) [Problems in geometry. Vol. 12] (82h:53002)
- Singularities in boundary value problems** ★Singularities in boundary value problems. (82i:35005)
- Sitges** ★Systems far from equilibrium. (82g:82004)
- Statistical mechanics** ★Systems far from equilibrium. (82g:82004)
- Summer School:**
- Convergence Structures and Applications to Analysis** ★Convergence structures and applications to analysis. (82d:46001)
- Symposium:**
- Microfunctions and Linear Differential Equations** ★Microfunctions and linear differential equations. VII. (Japanese) (82d:46002)
- Topology of Infinite Loop Spaces** ★Topology of infinite loop spaces. (Japanese) (82a:55001)
- Systems far from equilibrium** ★Systems far from equilibrium. (82g:82004)
- Topology of infinite loop spaces** ★Topology of infinite loop spaces. (Japanese) (82a:55001)

58Axx General theory of differentiable manifolds

secondary classifications:

Porteous, Ian R. ★Topological geometry. (82c:51018)

58A05 Differentiable manifolds, foundations

- Jadczyk, A. Z.** (with Pilch, Krzysztof A.) Superspaces and supersymmetries. 82c:58002
- Kirilov, A. A.** Natural differential operations on tensor fields. (Russian. English summary) 82c:58002
- Kock, Anders** Properties of well-adapted models for synthetic differential geometry. 82f:58004
- Kozłowski, George** (with Zenor, Phillip) A differentiable, perfectly normal, nonmetrizable manifold. 82c:58003
- Palais, Richard S.** A topological Gauss-Bonnet theorem. 82b:58002
- Pilch, Krzysztof A.** See Jadczyk, A. Z. 82c:58002
- Rogers, Alice** A global theory of supermanifolds. 82d:58001
- Sander, V. N.** Vector fields and differential equations on supermanifolds. (Russian) 82c:58004
- Zenor, Phillip** See Kozłowski, George. 82c:58003
- secondary classifications:
- Arcidiacono, Giuseppe** Multitime hyperspherical universes, cosmology and unified theories. (Italian) (82f:83082)
- Blumen, William** The geostrophic coordinate transformation. (82k:86010)
- Gates, S. James, Jr.** Supercovariant derivatives, super-Weyl groups, and $N=2$ supergravity. (82b:83070)
- (with Siegel, Warren) Understanding constraints in superspace formulations of supergravity. (82c:83068)
- (with Stelle, K. S.; West, P. C.) Algebraic origins of superspace constraints in supergravity. (82g:83029)
- Kalloš, R. E.** Counterterms in extended supergravities. (82e:83039)
- Lawvere, F. William** Toward the description in a smooth topos of the dynamically possible motions and deformations of a continuous body. (82i:58015)
- Penon, Jacques** Infinitésimaux et intuitionisme. (82m:51021)
- Siegel, Warren** See Gates, S. James, Jr. (82c:83068)
- Stelle, K. S.** See Gates, S. James, Jr.; et al. (82g:83029)
- West, P. C.** See Gates, S. James, Jr.; et al. (82g:83029)

58A07 Real-analytic and Nash manifolds [See also 32C05.]

secondary classifications:

Tancredi, Alessandro Some properties of analytic manifolds with boundary. (Italian. English summary) (82c:32013)

58A10 Differential forms

- Auer, Jan W.** Densities on smooth fiber bundles. 82j:58002
- Cerveau, Dominique** (with Lins Neto, Alcides) Formes intégrables tangentes à des actions commutatives. (English summary) 82b:58003

- Corona, Carlos** (with Varela, Fernando) Sur les C^0 -perturbations de la forme de contact canonique de la sphère S^{2p+1} . (English summary) 82g:58003
- Jakubczyk, Bronisław** (with Przytycki, Feliks) On J. Martinet's conjecture. (Russian summary) 82c:58003
- Kockinos, Constantin-Neophytos** Calculus on manifolds. III. The Lie algebra of derivations $\text{Der Der } A(X)$ of the Lie algebra of derivations $\text{Der } A(X)$. 82k:58003e
- Calculus on manifolds. I. Derivations and vector-valued forms: the Frölicher-Nijenhuis resolution. 82k:58003a
- Calculus on manifolds. II. The canonical identity element I . 82k:58003b
- Krivov, V. V.** On the extremal differential form for generalized modulus. (Russian) 82i:58002
- Lins Neto, Alcides** See Cerveau, Dominique. 82b:58003
- (Malgrange, Bernard)** See Ramis, Jean-Pierre. 82b:58004
- (Mattei, J.-F.)** See Ramis, Jean-Pierre. 82b:58004
- (Moussu, R.)** See Ramis, Jean-Pierre. 82b:58004
- Przytycki, Feliks** See Jakubczyk, Bronisław. 82c:58003
- Putz, Mircea** Sur la stabilité des tenseurs. (English summary) 82g:58004
- Ramis, Jean-Pierre** Frobenius avec singularités [d'après B. Malgrange, J. F. Mattei et R. Moussu]. 82b:58004
- Saks, R. S.** Boundary value problems for weakly elliptic systems of differential equations. (Russian) 82h:58001
- Sikorav, Jean-Claude** Formes différentielles fermées non singulières sur le tore de dimension n . (English summary) 82k:58004
- Tulczyjew, W. M.** The Euler-Lagrange resolution. 82g:58005
- Turiel, Francisco Javier** Modèles locaux des 3-formes fermées transitives sur les 5-variétés; cas où $\dim \mathcal{E} = 6$ et $\dim E = 2$. (English summary) [Local models of transitive closed 3-forms on 5-manifolds; the case when $\dim \mathcal{E} = 6$ and $\dim E = 2$] 82k:58005
- Varela, Fernando** See Corona, Carlos. 82g:58003

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- Arefeva, I. Ja.** Nonabelian Stokes formula. (Russian. English summary) (82a:53034)
- Campolattaro, A. A.** New spinor representation of Maxwell's equations. I. Generalities. (82c:78004a)
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- Cenkl, Bohumil** (with Porter, Richard) Malcev's completion of a group and differential forms. (82k:55013)
- Eguchi, Tohru** (with Hosotani, Yutaka) Integrability condition in loop space. (82i:8110a)
- (with Hosotani, Yutaka) Errata: "Integrability condition in loop space". (82i:8110b)
- Gelfand, I. M.** (with Gindikin, S. G.; Graev, M. I.) Problems of integral geometry connected with the integration of differential forms over straight lines in \mathbb{R}^n and \mathbb{C}^n . (Russian. English summary) (82g:53077)
- Gindikin, S. G.** Twistor representation of the solutions of Maxwell's system. (Russian) (82f:78003)
- See also Gelfand, I. M.; et al. (82g:53077)
- Graev, M. I.** See Gelfand, I. M.; et al. (82g:53077)
- Greub, W. H.** Pontrjagin classes and Weyl tensors. (82i:53034)
- Henkin, G. M.** (with Manin, Ju. I.) Twistor description of classical Yang-Mills-Dirac fields. (82f:81045)
- Hervás Burgos, Pablo** Differential forms in linear deformation. (Spanish) (82c:73027)
- Hosotani, Yutaka** See Eguchi, Tohru. (82i:8110a) and (82i:8110b)
- Hurwicz, Leonid** (with Richter, Marcel K.) An integrability condition with applications to utility theory and thermodynamics. (82a:90025)
- Kamimura, Kiyoshi** Relativistic string model in differential form. (82b:81134)
- Krèe, Paul** Super-mécanique lagrangienne. (English summary) (82i:81057)
- Les Lagrangiens des équations de Dirac et de H. Weyl sont des formes extérieures. (English summary) (82i:81058)
- Laurent-Thiébaud, Christine** Produits de courants et formule des résidus. (English summary) (82j:58007)
- Manin, Ju. I.** See Henkin, G. M. (82f:81045)
- Marques, Maria Higinia Rendeiro** Vector distributions on manifolds as indicatrices of continuous linear mappings. (Portuguese) (82a:46042)
- Paquet, Luc** Méthode de séparation des variables et calcul du spectre d'opérateurs sur les formes différentielles. (English summary) (82e:58100)
- Piene, Ragni** (with Ronga, Felice) A geometric approach to the arithmetic genus of a projective manifold of dimension three. (82e:14027)
- Porter, Richard** See Cenkl, Bohumil. (82k:55013)
- Richter, Marcel K.** See Hurwicz, Leonid. (82a:90025)
- Rideau, G.** Covariant quantizations of the Maxwell field. (French summary) (82h:81071)
- Ronga, Felice** See Piene, Ragni. (82e:14027)
- Sasaki, Ryu** Geometric approach to soliton equations. (82e:58051)
- Seke, Bobo** Sur les structures transversalement affines des feuilletages de codimension un. (English summary) (82b:57023)

58A12 de Rham theory [See also 14Fxx.]

- Auer, Jan W.** Fiber integration and Poincaré duality. 82a:58002
- Chen, Kuo Tsai** Pullback path fibrations, homotopies and iterated integrals. 82e:58004
- Ferrari, Aldo** On the homology of a smooth manifold. 82c:58003
- Gómez, Francisco** Extension of cross-sections and a generalized de Rham theorem. (Spanish summary) 82i:58004
- Mastrogliacomo, Pasquale** The cohomology of jet fields and the cohomology of covariant tensor fields on a manifold with a linear connection. (Italian. English summary) 82a:58003

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 Igolín, V. A. Decomposition theorems for double foliations that are compatible with pulverizations. (Russian) (82b:53042)
 Lubczonok, Grzegorz Differential concomitants of tensor fields. (Polish summary) (82a:53014)
 Morgan, John W. See Griffiths, Phillip A., (82m:55014)
 Pope, C. N. Eigenfunctions and Spin^r structures in $C P^2$. (82a:83040)
 Rubcov, V. N. Cohomology of the Der-complex. (Russian) (82a:13007)

58A14 Hodge theory [See also 14C30, 14Fxx, 32Cxx.]

- Dodziuk, Jozef Vanishing theorems for square-integrable harmonic forms. 82d:58003
 Greene, R. E. (with Wu, Hung Hsi) Harmonic forms on noncompact Riemannian and Kähler manifolds. 82c:58005
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- Boya, Luis J. (with Mateos, Juan) The kink: real Hopf bundle and Morse theory. (82g:81050)
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58A15 Exterior differential systems (Cartan theory)

- Arhutik, G. M. (with Grudo, È. I.) A general theory of higher-order total linear differential equations. (Russian. English summary) 82i:58005
 Crampin, Michael (with Hodgkin, Luke; Robinson, David Clyde; McCarthy, Patrick J.) 2-manifolds of constant curvature, 3-parameter isometry groups and Bäcklund transformations. 82m:58001
 Fokas, A. S. (with Fuchssteiner, Benno) Bäcklund transformations for hereditary symmetries. 82c:58006
 Fuchssteiner, Benno See Fokas, A. S., 82c:58006
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 Konopelchenko, B. G. The group structure of Bäcklund transformations. 82b:58005
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 Meleško, S. V. DP-conditions and the problem of joining various DP-solutions to each other. (Russian) 82m:58002
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 Prikarpat'skii, A. K. The geometric structure and Bäcklund transforms of nonlinear evolutionary equations that have a Lax representation. (Russian. English summary) 82c:58007
 Robinson, David Clyde See Crampin, Michael; et al., 82m:58001
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- Ablowitz, Mark J. (with Ramani, A.; Segur, Harvey) A connection between nonlinear evolution equations and ordinary differential equations of P -type. I. (82i:35148a)
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 Cosgrove, Christopher M. Relationships between the group-theoretic and soliton-theoretic techniques for generating stationary axisymmetric gravitational solutions. (82m:83012)
 Creamer, Dennis B. (with Thacker, H. B.; Wilkinson, David) Some exact results for the two-point function of an integrable quantum field theory. (82b:81082)
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- (82c:73026)
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 Gordon, T. J. Conserved currents of the Klein-Gordon field. (82k:81011)
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 Pačeva, S. I. See Nisimov, E. R., (82a:81036)
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 Prasad, M. K. See Ogielski, A. T.; et al., (82f:81050)
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 Sinha, A. See Ogielski, A. T.; et al., (82f:81050)
 Smirnov, V. G. See Leznov, A. N., (82g:81084)
 Šubov, V. I. Finding N -soliton solutions of multidimensional nonlinear equations by means of Hirota's method. (Russian. English summary) (82b:35145)
 Talyšev, A. A. The method of differential constraints and invariant solutions of strictly hyperbolic systems with two independent variables. (Russian) (82m:58059)
 Thacker, H. B. See Creamer, Dennis B.; et al., (82b:81082)
 Tu, Gui Zhang On the similarity solution of evolution equation $u_t = H(x, t, u, u_x, u_{xx}, \dots)$. (82d:35017)
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 Wadati, Miki See Omote, Minoru, (82f:35004); (82b:83039) and (82i:35157)
 Wang, Ling Lie Chau See Ogielski, A. T.; et al., (82f:81050)
 Wilkinson, David See Creamer, Dennis B.; et al., (82b:81082)
 Yortos, Y. C. See Fokas, A. S., (82k:34010)

58A17 Pfaffian systems

- Chudnovsky, David V. The generalized Riemann-Hilbert problem and the spectral interpretation. 82g:58037
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 Dodd, Roger K. See Morris, Hedley C., 82c:58008
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 Golubeva, V. A. Hypergeometric Appell and Kampé de Fériet functions of two variables. (Russian) 82j:58004
 Grudo, È. I. (with Jančuk, L. F.) On the general theory of Pfaffian systems. (Russian) 82c:58006
 Ibragimov, N. H. (with Šabat, A. B.) Infinite Lie-Bäcklund algebras. (Russian) 82b:58007
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 Morris, Hedley C. (with Dodd, Roger K.) Geometric structures and inverse scattering problems for Painlevé transcendents. 82k:58008

- Petrovskii, G. N. Matrices that commute with their partial derivatives. (Russian. English summary) **82i:58007**
 Ruiz, Ceferino See Giaro, André; et al., **82b:58006**
 Šabat, A. B. See Ibragimov, N. H., **82b:58007**
 Žužoma, E. V. A topological classification of foliations described by one-dimensional Pfaffian forms on an n -dimensional torus. (Russian) **82j:58005**

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- Bolibrub, A. A. Example of an unsolvable Riemann-Hilbert problem on CP^2 . (Russian) **(82k:32066)**
 van den Essen, Arno Reduction of singularities of the differential equation $Ady = Bdx$. **(82m:34007)**
 Gérard, R. (with Sibuya, Yasutaka) Étude de certains systèmes de Pfaff avec singularités. **(82m:34008a)**
 See also Ramis, Jean-Pierre, **(82m:34008b)**
 Kimura, Toshihisa (with Matuda, Tizuko) On systems of differential equations of order two with fixed branch points. **(82c:34010)**
 Matuda, Tizuko See Kimura, Toshihisa, **(82c:34010)**
 Modugno, Marco On the structure of classical kinematics. I. Absolute kinematics. **(82m:70001a)**
 Okamoto, Kazuo Polynomial Hamiltonians associated with Painlevé equations. I. **(82j:34010a)**
 Polynomial Hamiltonians associated with Painlevé equations. II. Differential equations satisfied by polynomial Hamiltonians. **(82j:34010b)**
 On the r -function of the Painlevé equations. **(82i:34005)**
 Ramis, Jean-Pierre À propos du théorème de Borel-Ritt à plusieurs variables. **(82m:34008b)**
 Romanenko, O. Ju. (with Šarkovskii, O. M.) Qualitative investigation of a class of differential-difference equations. (Russian) **(82f:34106)**
 Šarkovskii, O. M. Qualitative analysis of some types of differential-difference equations. **(82b:38081)**
 See also Romanenko, O. Ju., **(82f:34106)**
 Sasaki, Ryu Pseudopotentials for the general AKNS system. **(82a:35027)**
 Sibuya, Yasutaka A linear Pfaffian system at an irregular singularity. **(82h:13019)**
 See also Gérard, R., **(82m:34008a)** and Ramis, Jean-Pierre, **(82m:34008b)**
 Ueno, Kimio Monodromy preserving deformation of linear differential equations with irregular singular points. **(82f:34012)**
 Monodromy preserving deformation and its application to soliton theory. **(82f:34013)**

58A20 Jets

- Arutjunjan, S. H. Geometry of an n -fold integral depending on $n+1$ parameters. (Russian) **82k:58009**
 Grozman, P. Ja. Classification of bilinear invariant operators on tensor fields. (Russian) **82b:58008**
 Kock, Anders Formal manifolds and synthetic theory of jet bundles. **82f:58006**
 Kockinos, Constantin-Neophytos On jets. **82m:58003**
 Koike, Satoshi A remark on sufficiency of jets. **82b:58009**
 Koliar, Ivan On the automorphisms of principal fibre bundles. **82j:58007**
 Kupersmidt, Boris Geometry of jet bundles and the structure of Lagrangian and Hamiltonian formalisms. **82e:58006**
 Libermann, Paulette Introduction à l'étude de certains systèmes différentiels. **82a:58004**
 Nôno, Takayuki See Sakurai, Takatoshi, **82k:58010**
 Reiman, Allan Computer-aided closure of the Lie algebra associated with a nonlinear partial differential equation. **82j:58006**
 Sakurai, Takatoshi (with Nôno, Takayuki) On some properties of prolongations. **82k:58010**
 Shadwick, William F. The KdV prolongation algebra. **82f:58007**
 Šramo, Jozef Holonomy conditions. (Slovak) **82e:58007**

secondary classifications:

- Bullough, Robin K. See Sasaki, Ryu, **(82j:58067)**
 Cahen, Michel (with Gutt, Simone) Maxwell's equations in Segal's model: solutions and their invariance. **(82i:58076a)**
 (with Gutt, Simone) Erratum: "Maxwell's equations in Segal's model: solutions and their invariance". **(82i:58076b)**
 Coleman, R. A. (with Korte, H.) Jet bundles and path structures. **(82b:83050)**
 Dekrét, Anton On forms and connections on fibre bundles. **(82k:53047)**
 Dodd, Roger K. See Morris, Hedley C., **(82b:83025)**
 Gutt, Simone See Cahen, Michel, **(82i:58076a)** and Cahen, Michel, **(82i:58076b)**
 Hohlov, A. S. Controllability on a jet manifold. (Russian) **(82f:93008)**
 Korte, H. See Coleman, R. A., **(82b:83050)**
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 Olver, Peter J. On the Hamiltonian structure of evolution equations. **(82f:58042)**
 Sasaki, Ryu (with Bullough, Robin K.) Geometric theory of local and nonlocal conservation laws for the sine-Gordon equation. **(82j:58067)**
 Vasil'ev, A. M. Differential algebra. Contravariant analytical methods in differential geometry. (Russian) **(82f:58005)**
 Zhang, Xue Ming Pseudopotential method and soliton solutions of the Korteweg-de Vries equation, the sine-Gordon equation and the nonlinear Schrödinger equation on a nonclassical variational field. (Chinese. English summary) **(82j:35137)**

58A25 Currents

- Arques, Didier (with Roth, Jean-Pierre) Courant superficiel et champ magnétostatique associé. **82k:58011**

- Ermine, Jean-Louis Courants ergodiques et répartition géométrique. **82b:58010**
 Laurent-Thiébaud, Christine Produits de courants et formule des résidus. (English summary) **82j:58007**
 Puta, Mircea The stability of de Rham currents. **82a:58005**
 Some remarks about the currents on a Lie group. (French summary) **82b:58002**
 Roth, Jean-Pierre See Arques, Didier, **82k:58011**

secondary classifications:

- Brothers, John E. Invariance of solutions to invariant parametric variational problems. **(82b:49027)**
 Ferrari, Aldo On the homology of a smooth manifold. **(82i:58003)**
 Tausch, Engelbert The n -dimensional least area problem for boundaries on a convex cone. **(82e:53014)**

58A30 Vector distributions (subbundles of the tangent bundles)

- Georgiev, Georgi Iv. On nonstationary distributions and their orthogonal invariants. (Romanian. French summary) (See **82b:53003**)
 Varlenko, A. N. Obstructions to local equivalence of distributions. **82k:58012**

secondary classifications:

- Charière, Hélène Triangulation formelle de certains systèmes de Pfaff complètement intégrables et application à l'étude C^∞ des systèmes non linéaires. **(82d:34018)**
 D'Auria, R. (with Fré, P.; Regge, Tullio) Coupling of matter to supergravity from the rheonomic symmetry point of view and the origin of the auxiliary fields. **(82e:83038)**
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 Regge, Tullio See D'Auria, R.; et al., **(82e:83038)**

58A35 Stratified sets [See also 32Bxx, 58Cxx.]

- Goresky, R. Mark Whitney stratified chains and cochains. **82j:58008**
 Navarro Aznar, V. (with Trotman, D. J. A.) Whitney regularity and generic wings. (French summary) **82j:58009**
 Pignoni, Roberto Morse functions and the strict Whitney condition. (Italian summary) **82c:58006**
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secondary classifications:

- Bruce, J. W. Canonical stratifications of functions: the simple singularities. **(82a:58011)**
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 Guaraldo, Francesco (with Macri, Patrizia) Immersion theorems for analytic stratifications. (Italian. English summary) **(82f:32026)**
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58A40 Differential spaces

- Kowalczyk, Adam The open immersion invariance of differential spaces of class D_0 . **82b:58011**
 Tangent differential spaces and smooth forms. **82j:58010**
 Marshall, Charles D. Lie derivatives in differentiable spaces. **82d:58005**
 Matuszczyk, Hanna (with Waliszewski, Włodzimierz) An immersion of a differential space in a Cartesian space. **82b:58012**
 Riemer, Rolf-Ingraben Eine Verallgemeinerung topologischer Mannigfaltigkeiten. **82e:58008**
 Teufel, Michael Glättung endlich-differenzierbarer Räume. (English summary) **82b:58003**
 Waliszewski, Włodzimierz See Matuszczyk, Hanna, **82b:58012**

secondary classifications:

- Kowalczyk, Adam On partitions of unity in differential spaces. (Russian summary) **(82m:54015)**

58A99 None of the above, but in this section

- Kirillov, A. A. Invariant operators over geometric quantities. (Russian) **82m:58004**
 Rogers, Alice Some examples of compact supermanifolds with nonabelian fundamental group. **82i:58008**

secondary classifications:

- Beck, Jon M. On the relationship between algebra and analysis. **(82a:18005)**
 Gel'fand, I. M. (with Gindikin, S. G.; Graev, M. I.) Integral geometry in affine and projective spaces. (Russian) **(82m:43017)**
 Gindikin, S. G. See Gel'fand, I. M.; et al., **(82m:43017)**
 Graev, M. I. See Gel'fand, I. M.; et al., **(82m:43017)**
 Grozman, P. Ja. Local invariant bilinear operators over tensor fields on the plane. (Russian. English summary) **(82e:53029)**
 Kirillov, A. A. Infinite-dimensional groups, their representations, orbits, invariants. **(82a:22022)**
 Mah'šev, V. A. (with Petrova, E. N.) Duality transformations of Gibbs random fields. (Russian) **(82j:82012)**
 Ne'eman, Yuval ★ Symétries jaugées et variétés de groupe. (French) [Gauge symmetries and group manifolds] **(82e:81044)**
 Nicolai, H. (with Townsend, Paul; van Nieuwenhuizen, Peter) Comments on 11-dimensional supergravity. **(82m:83054)**

- van Nieuwenhuizen, Peter See Nicolai, H.; et al., (82m:83054)
 Petrova, E. N. See Malyshev, V. A., (82j:82012)
 Smolin, Lee Superspace unmasked: the physical interpretation of supergravity theory. (82m:83055)
 Townsend, Paul See Nicolai, H.; et al., (82m:83054)
 Vinet, Luc See Ne'eman, Yoram, (82c:81044)
 Ward, Richard Samuel Ansatz for self-dual Yang-Mills fields. (82m:81059)

58Bxx Infinite-dimensional manifolds

58B05 Homotopy and topological questions

- Nowak, Bogdan On the Lipschitzian retraction of the unit ball in infinite-dimensional Banach spaces onto its boundary. (Russian summary) 82g:58008
 Šavgulidze, E. T. A diffeomorphism of a locally convex space. (Russian) 82d:58007

secondary classifications:

- Chapman, T. A. ★Лекции о Q -многообразиях. (Russian) [Lectures on Hilbert cube manifolds] (82m:57008)
 Dobrowolski, Tadeusz (with Toruńczyk, Henryk) On metric linear spaces homeomorphic to I_2 and compact convex sets homeomorphic to Q . (Russian summary) (82j:57010) (Fedotuk, V. V.) See Chapman, T. A., (82m:57008)
 (Filippov, V. V.) See Chapman, T. A., (82m:57008)
 (Geoghegan, Ross) See Problems: Infinite-dimensional topology, (82a:57015)
 Gutman, S. M. Homeomorphisms of nonseparable B -spaces. II. (Russian) (82c:46024)
 Hirsiašvili, G. N. The possibility of deleting the projective subsets of Banach spaces by étale diffeomorphisms. (Russian. English and Georgian summaries) (82m:57017)
 Kalinin, V. A. Extension of embeddings and homeomorphisms of subsets of the Tikhonov cube. (Russian) (82c:54022)
 Sakai, Katsuro Images of I_2 -manifolds under approximate fibrations. (82h:57017)
 Toruńczyk, Henryk Characterizing Hilbert space topology. (82i:57016)
 See also Dobrowolski, Tadeusz, (82j:57010)
 Vo Thanh Liam An α -approximation theorem for Q^∞ -manifolds. (82k:57011)
Problems:
 Infinite-dimensional topology Open problems in infinite-dimensional topology. (82a:57015)

58B10 Differentiability questions

- Papaghic, Neculai Variétés différentiables modélées sur des espaces de Fréchet; l'intégration des champs de vecteurs. 82d:58006

secondary classifications:

- Bayoumi, Aboubakr Bounding subsets of some metric vector spaces. (82j:46058)
 Frölicher, Alfred Applications lisses entre espaces et variétés de Fréchet. (English summary) [Smooth maps between Fréchet spaces and manifolds] (82k:58017)
 Ogiveckii, V. I. (with Sokačev, E. S.) The gravitational axial-vector superfield and the formalism of differential geometry. (82g:83030)
 Sokačev, E. S. See Ogiveckii, V. I., (82g:83030)

58B12 Questions of holomorphy [See also 32-XX, 46G20.]

- Welland, Robert Grassmann spaces in Hilbert space. 82d:58008

58B15 Fredholm structures [See also 47A53.]

- Antonovskii, E. Ja. Construction of the degree for proper almost strongly Fredholm mappings. (Russian) 82h:58013
 Existence and properties of the degree of almost strongly Fredholm mappings. (Russian) 82f:58008
 Fainstein, A. S. Stability of Fredholm complexes of Banach spaces with respect to perturbations which are small in q -norm. (Russian. Azerbaijani and English summaries) 82f:58009
 Invernizzi, Sergio Surjectivity of perturbations of Fredholm mappings using semi-inner-products. 82f:58010
 secondary classifications:
 Abts, Dietmar On injective holomorphic Fredholm mappings of index 0 in complex Banach spaces. (82h:46057)
 Fainstein, A. S. (with Šul'man, V. S.) Fredholm complexes of Banach spaces. (Russian) (82c:47015)
 Lockhart, Robert B. Fredholm properties of a class of elliptic operators on noncompact manifolds. (82j:35050)
 Šul'man, V. S. See Fainstein, A. S., (82c:47015)

58B20 Riemannian, Finsler and other geometric structures [See also 53C20, 53C60.]

- Anastase, Mihai Generalized affine connections on Banach manifolds. 82d:58009
 (with Popovici, Iulian) Constant linear connections on Banach manifolds. 82h:58014
 Assouad, Patrice Plongements lipschitziens dans un espace pentagonal. 82i:58009
 Bothe, H. G. Der Satz von Hopf und Rinow für unendlichdimensionale Mannigfaltigkeiten. 82k:58013
 Fomin, V. E. Projective correspondence of two Riemannian spaces of infinite dimension. (Russian) 82a:58006
 On the geodesic mapping of infinite-dimensional Riemannian spaces into

symmetric spaces with an affine connection. (Russian) 82g:58009

- Iyanaga, Manabu A differential geometry on the Hilbert manifold. 82d:58010
 Kanitani, Jōyō Une démonstration précise sur l'équation du chemin horizontal. 82h:58014
 Popovici, Iulian See Anastase, Mihai, 82h:58014
 Ravaska, Timo On a theory of surfaces based on tangent spaces of the second kind. 82c:58009

secondary classifications:

- Abatzoglou, Theagenis Unique best approximation from a C^2 -manifold in Hilbert space. (82h:58015)
 Gambini, R. (with Trias, A.) Geometrical origin of gauge theories. (82h:81090)
 Heisey, R. E. (with Toruńczyk, Henryk) On the topology of direct limits of ANRs. (82k:57010)
 Sohnius, Martin F. (with Stelle, K. S.; West, P. C.) Dimensional reduction by Legendre transformation generates off-shell supersymmetric Yang-Mills theories. (82a:81051)
 Stelle, K. S. See Sohnius, Martin F.; et al., (82a:81051)
 Toruńczyk, Henryk See Heisey, R. E., (82k:57010)
 Trias, A. See Gambini, R., (82h:81090)
 West, P. C. See Sohnius, Martin F.; et al., (82a:81051)

58B25 Group structures and generalizations on infinite-dimensional manifolds [See also 22E65, 58D05.]

secondary classifications:

- Albeverio, Sergio (with Hoegh-Krohn, Raphael) Some Markov processes and Markov fields in quantum theory, group theory hydrodynamics and C^* -algebras. (82j:60127)
 Binz, E. The notion of torsion and second fundamental tensor revisited. (82f:53063)
 Hoegh-Krohn, Raphael See Albeverio, Sergio, (82j:60127)
 Kaljužnyi, V. N. Quasifinite isometry groups of Minkowski spaces. (Russian) (82a:22021)
 Newman, R. P. A. C. Instabilities of certain empty Robertson-Walker space-times. (82h:83074)
 Ōmori, Hideki ★Mugen jigen ri gunron. (Japanese) [Theory of infinite-dimensional Lie groups] (82k:58001)
 Theory of infinite-dimensional Lie groups. (Japanese) (82c:22021)
 Segal, Graeme Unitary representations of some infinite-dimensional groups. (82k:22004)

58B99 None of the above, but in this section

- Gorzi, T. A. (with Gulida, L. L.) Structure of a general convex hyperspace of a Hilbert space. (Russian) 82f:58011
 Gulida, L. L. See Gorzi, T. A., 82f:58011

58Cxx Calculus on manifolds; nonlinear operators [See also 47Hxx.]

58C05 Real-valued functions

- Levy, Ronnie (with Rice, Michael D.) The number of compact fibers of mappings on Banach spaces. 82i:58010
 Rice, Michael D. See Levy, Ronnie, 82i:58010

secondary classifications:

- Manida, S. N. Static solutions of classical Yang-Mills equations with sources. (Russian. English summary) (82c:81039)
 Spallek, Karlheinz Strong approximation in real analytic coherent sheaves. (Italian summary) (82f:32019)

58C06 Set valued and function-space valued mappings

secondary classifications:

- Conti, Giuseppe (with Iannacci, Rita) An intersection theorem for multivalued maps. (82i:47102)
 Himmelberg, C. J. (with Parthasarathy, T.; Van Vleck, F. S.) On measurable relations. (82c:28011)
 Iannacci, Rita See Conti, Giuseppe, (82i:47102)
 Parthasarathy, T. See Himmelberg, C. J.; et al., (82c:28011)
 Thibault, Lionel Cônes tangents et épi-différentiels de fonctions vectorielles. (82h:26015)
 Van Vleck, F. S. See Himmelberg, C. J.; et al., (82c:28011)

58C07 Continuity properties of mappings

- Abatzoglou, Theagenis Unique best approximation from a C^2 -manifold in Hilbert space. 82h:58015
 Kahane, Jean-Pierre The 13th Hilbert problem and analytic functions. 82h:58004
 Krantz, Steven G. (with Parks, Harold R.) Distance to C^4 hypersurfaces. 82h:58005
 Laurent-Thiebaud, Christine Régularisation sur une variété. (English summary) 82j:58011
 Parks, Harold R. See Krantz, Steven G., 82h:58005

secondary classifications:

- Antonovskii, E. Ja. The study of nonsmooth mappings of Hilbert spaces by methods of smooth analysis. (Russian) (82h:47083)
 Braess, Dietrich Global analysis in nonlinear approximation and its application to exponential approximation. I. The uniqueness theorem for Haar-embedded manifolds. (82m:41015a)

Global analysis in nonlinear approximation and its application to exponential approximation. II. Applications to exponential approximation. (82m:41015b)
 Kergin, Paul A natural interpolation of C^k functions. (82b:41007)

58C10 Holomorphic maps [See also 32-XX.]

secondary classifications:

- Bruma, Joaquim Analytic Denjoy-Carleman algebras. (Spanish. English summary) (82b:30023)
 Colombeau, Jean-François (with Perrot, B.) Reflexivity and kernels in infinite-dimensional holomorphy. (82e:46063)
 Holomorphy in locally convex spaces and operators on the Fock spaces. (82b:46056)
 (with Mujica, Jorge) Existence of holomorphic mappings with prescribed asymptotic expansions at a given set of points in infinite dimensions. (82m:46049)
 Fujimoto, Yoshihisa Analytic functionals on a countably infinite-dimensional topological vector space. (82b:46059)
 Helemskii, A. Ja. Homological methods in the holomorphic calculus of several operators in Banach space, after Taylor. (Russian) (82e:47020)
 Mujica, Jorge See Colombeau, Jean-François. (82m:46049)
 O'Brian, Nigel R. (with Toledo, Domingo; Tong, Yue Lin L.) Hirzebruch-Riemann-Roch for coherent sheaves. (82f:32022)
 Perrot, B. See Colombeau, Jean-François. (82e:46063)
 Sparing, H.-D. Analytische Operatoren vektorieller Veränderlicher in reellen und komplexen Banachräumen. II. (82e:46057a)
 Toledo, Domingo See O'Brian, Nigel R.; et al. (82f:32022)
 Tong, Yue Lin L. See O'Brian, Nigel R.; et al. (82f:32022)
 Ushiki, Shigehiro Sur les liaisons-cols des systèmes dynamiques analytiques. (English summary) (82b:58045)
 Dynamical systems ★ Various problems for nonlinear circuits in dynamical systems. (Japanese) (82b:94034)
 Symposium:
 Various Problems for Nonlinear Circuits in Dynamical Systems ★ Various problems for nonlinear circuits in dynamical systems. (Japanese) (82b:94034)
 Various problems for nonlinear circuits in dynamical systems ★ Various problems for nonlinear circuits in dynamical systems. (Japanese) (82b:94034)

58C15 Implicit function theorems; global Newton methods

- Appel, Ju. (with Zabrejko, P. P.) Condensing operators in the theory of implicit functions. (Russian) (82j:58012)
 Bolotov, V. A. (with Šoihet, D. M.) Estimate of the remainder term of an analogue of Taylor's formula for systems of implicit functions. (Russian) (82e:58010)
 Burdakov, O. P. Some globally converging modifications of the Newton method for solving systems of nonlinear equations. (Russian) (82g:58010)
 Craven, B. D. Implicit function theorems and Lagrange multipliers. (82d:58011)
 Desolneux-Moulis, Nicole A propos du théorème de Newlander-Nirenberg. (English summary) (82e:58011)
 (Jittorntrum, K.) See Kumagai, S. (82f:58012)
 Keenan, Donald Further remarks on the global Newton method. (82m:58015)
 Keller, Herbert B. Geometrically isolated nonisolated solutions and their approximation. (82j:58013)
 Kumagai, S. Technical comment to: "An implicit function theorem" [J. Optim. Theory Appl. 25 (1978), no. 4, 575-577; MR 80b:26018] by K. Jittorntrum. (82f:58012)
 Nieuwenhuis, J. W. About a local approximation theorem and an inverse function theorem. (82a:58007)
 Nirenberg, Louis Remarks on nonlinear problems. (82e:58012)
 Petzeltová, Hana Remark on a Newton-Moser type method. (82b:58016)
 Plotnikov, P. I. A variant of the Nash-Moser theorem. (Russian) (82e:58013)
 Potra, Florian Alexandru An application of the induction method of V. Piák to the study of regula falsi. (Czech summary) (82f:58013)
 Sadyrhanov, R. S. Covering mappings in domains of normed spaces. (Russian. Azerbaijani and English summaries) (82f:58014)
 Sandberg, Irwin W. Diffeomorphisms and Newton-direction algorithms. (82e:58014)
 Global inverse function theorems. (82e:58015)
 On Newton-direction algorithms and diffeomorphisms. (See 82d:93001)
 On Newton-direction algorithms and diffeomorphisms. (82g:58011)
 Global implicit function theorems. (82j:58014)
 Shih, Mou Hsiang A further generalization of the Ostrowski theorem in Banach spaces. (82j:58015)
 Šilov, G. E. ★ Дифференцирование функций: приложения к анализу. (Russian) [Differentiation of functions: applications to analysis.] (82j:58016)
 Šoihet, D. M. See Bolotov, V. A. (82e:58010)
 Suhinin, M. F. An inverse function theorem in locally convex spaces. (Russian) (82a:58008)
 Traub, J. F. (with Woźniakowski, H.) Convergence and complexity of interpolatory-Newton iteration in a Banach space. (82g:58012)
 Vidal, Claude Un théorème de fonction implicite avec perte de différentiabilité. (English summary) (82f:58015)
 Woźniakowski, H. See Traub, J. F. (82g:58012)
 Zabrejko, P. P. See Appel, Ju. (82j:58012)
 Žestkov, S. V. A constructive algorithm for solution of the Cauchy problem for first-order linear partial differential equations. (Russian. English summary) (82g:58013)

secondary classifications:

- Anselone, P. M. Discrete approximation of operator equations. (82m:47042)
 Arslanov, F. H. See Kurčatov, V. A. (82e:65070)
 Balázs, M. On a method of third order. (Romanian summary) (82e:65067)

- Beale, J. Thomas The existence of cnoidal wave waves with surface tension. (82b:76016)
 Bel'tjukov, B. A. (with Černjak, V. Ja.) Investigation of the quadratic convergence of an iteration process of the Newton-Kantorovič type with disparate arguments. (Russian) (See 81d:65003)
 Brooks, Peter S. Infinite retrogression in the Eaves-Saigal algorithm. (82d:90102)
 Černjak, V. Ja. See Bel'tjukov, B. A. (See 81d:65003)
 Chi, Zong Tao (with Qi, Li Qun) Some global inverse function theorems. (Chinese) (82e:26009)
 Fonarev, A. A. Solution of nonlinear equations with monotone mapping in Hilbert space. (Russian) (82g:47044)
 Garcia, C. B. (with Li, Tien Yien) On a path following method for systems of equations. (82f:65060)
 Georg, Kurt On tracing an implicitly defined curve by quasi-Newton steps and calculating bifurcation by local perturbations. (82b:58031)
 Griewank, Andreas (with Osborne, M. R.) Newton's method for singular problems when the dimension of the null space is > 1 . (82e:65032)
 Groze, Sever On Steffensen's method for solving nonlinear operator equations defined in Fréchet spaces. (82f:65038)
 Hamilton, Richard S. Deformation of complex structures on manifolds with boundary. II. Families of noncoercive boundary value problems. (82e:32035)
 Holota, Petr The boundary problem of physical geodesy after the appearance of Lars Hörmander's paper: present state. (Russian summary) (See 82g:31001)
 Kurčatov, V. A. (with Arslanov, F. H.) L. V. Kantorovič's theorem for a class of methods of linearization of the approximate solution of functional equations. (Russian) (82e:65070)
 Li, Tien Yien (with Yorke, James A.) A simple reliable numerical algorithm for following homotopy paths. (82b:65047)
 See also Garcia, C. B. (82f:65060)
 Lopes, T. L. See Martinez, José Mario. (82f:65033)
 Martinez, José Mario (with Lopes, T. L.) Combination of the sequential secant method and Broyden's method with projected updates. (German summary) (82f:65033)
 Mukherji, Anjan A stable price adjustment process. (82m:90032)
 Nazimov, A. B. On the rate of convergence of the regularization method in Hilbert space. (Russian. Tajiki summary) (82m:47011)
 Osborne, M. R. See Griewank, Andreas. (82e:65032)
 Potra, Florian Alexandru (with Piák, Vlastimil) A generalization of regula falsi. (82j:65029)
 The rate of convergence of a modified Newton's process. (Czech summary) (82j:65038)
 Piák, Vlastimil See Potra, Florian Alexandru. (82j:65029)
 Qi, Li Qun See Chi, Zong Tao. (82e:26009)
 Schaible, Siegfried (with Zang, Israel) On the convexifiability of pseudoconvex C^2 -functions. (82a:90124)
 Scheurle, Jürgen Newton iterations without inverting the derivative. (82e:65072)
 Shamir, Shlomo Two new triangulations for homotopy fixed point algorithms with an arbitrary grid refinement. (82b:65049)
 Sparing, H.-D. Analytische Operatoren vektorieller Veränderlicher in reellen und komplexen Banachräumen. III. (82e:46057b)
 Svaričinskaja, N. A. Approximate solution of a nonlinear problem with a parameter through a combination of the Newton-Kantorovič method and the method of averaging functional corrections. (Russian) (82f:47077)
 Tanabe, Kunio A geometric method in nonlinear programming. (82f:65041)
 Todd, Michael J. Numerical stability and sparsity in piecewise-linear algorithms. (82b:65050)
 Turinici, Mihai Function Lipschitzian mappings on convex metric spaces. (82f:54054)
 Weber, Helmut (with Werner, W.) On the accurate determination of nonisolated solutions of nonlinear equations. (German summary) (82e:65062)
 Werner, W. See Weber, Helmut. (82e:65062)
 Wolfe, M. A. An existence-convergence theorem for a class of iterative methods. (82f:65039)
 Yorke, James A. See Li, Tien Yien. (82f:65047)
 Zang, Israel See Schaible, Siegfried. (82a:90124)
 Zlepko, P. P. Application of the method of averaging functional corrections to the approximate construction of an implicit function. (Russian. English summary) (82a:47061)

58C20 Differentiation theory (Gâteaux, Fréchet, etc.) [See also 26Exx, 46Gxx.]

- Akilov, G. P. (with Djatlov, V. N.) ★ Элементы функционального анализа. (Russian) [Elements of functional analysis] (82f:58011)
 Dayal, S. k -discrete differentials of certain operators on Banach spaces. (82j:58017)
 Dem'janov, V. F. The relation between the Clarke subdifferential and a quasidifferential. (Russian. English summary) (82f:58012)
 Djatlov, V. N. See Akilov, G. P. (82f:58011)
 Durdil, Jiří On symmetric differentiation. (82e:58016)
 Fabian, Marian Differentiability via one-sided directional derivatives. (82f:58013)
 Fenchel, Rachida Différentiabilité de la norme modulaire dans les espaces L_p et E_p . (82f:58016)
 Gähler, Werner Generalized Marinescu convergence. (82m:58005)
 Graff, Richard A. A variant of the chain rule for differential calculus. (82b:58017)
 Hiriart-Urruty, J.-B. Lipschitz r -continuity of the approximate subdifferential of a convex function. (82e:58007)
 Ioffe, Alexandre D. Nonsmooth analysis: differential calculus of nondifferentiable mappings. (82j:58018)
 Kuršev, A. G. On a general method of subdifferentiation. (Russian) (82e:58014)
 Lawvere, F. William Toward the description in a smooth topos of the dynamically possible motions and deformations of a continuous body. (82f:58015)
 de León, Manuel (with Villaverde, Carlos) Calcul différentiel sur les fibres tangentes d'ordre supérieur. (English summary) (82f:58016)

- Puri, Madan L. (with Ralescu, Dan A.) Différentielle d'une fonction floue. (English summary) [Differential of a fuzzy function] **82m:58006**
- Ralescu, Dan A. See Puri, Madan L., **82m:58006**
- Rudolph, Klaus-Peter Michal-Bastiani differentiability on topological groups. **82i:58016**
- Thibault, Lionel Subdifferentials of compactly Lipschitzian vector-valued functions. **82c:58006**
- Truong Công Nghê (with Yamamoto, S.) Locally convex spaces, differentiation and manifolds. **82c:58017**
- Villaverde, Carlos See de León, Manuel, **82i:58016**
- Yamamoto, S. See Truong Công Nghê, **82c:58017**

secondary classifications:

- (Aron, Richard M.) See Nachbin, Leopoldo, **(82i:58002)**
- Audender, Alfred Sur la différentiabilité de la fonction d'appui du sous-différentiel à ϵ -près. (English summary) **(82b:49021)**
- Stabilité en programmation non différentiable. Dérivée directionnelle seconde inférieure. (English summary) [Stability in nondifferentiable mathematical programming. Lower second-order directional derivative] **(82k:90093)**
- Banfi, Carlo (with Fabrizio, Mauro) On the concept of subbody in continuum mechanics. (Italian. English summary) **(82g:73008)**
- Borwein, J. M. See Tijs, S. H., **(82a:90086)**
- Colzas, Stefan On the Lipschitz properties of continuous convex functions. **(82e:26020)**
- Colombeau, Jean-François (with Meise, Reinhold) C^∞ -functions on locally convex and on bornological vector spaces. **(82k:46037)**
- Daleckiĭ, Ju. L. (with Fomin, S. V.) Differential equations for distributions in infinite-dimensional spaces. (Russian) **(82c:46054)**
- Fabrizio, Mauro See Banfi, Carlo, **(82g:73008)**
- Fitzpatrick, Simon Metric projections and the differentiability of distance functions. **(82b:41028)**
- Flett, T. M. ★ Differential analysis. **(82e:26021)**
- Fomin, S. V. See Daleckiĭ, Ju. L., **(82c:46054)**
- Frölicher, Alfred Catégories cartésiennement fermées engendrées par des monoïdes. **(82i:18008)**
- Gähler, Siegfried Generalized notions of differentiability and their application in optimization theory. **(82k:49021)**
- Vergemeinerte Ableitungen und Vektoroptimierung. **(82d:90117)**
- Hiriart-Urruty, J.-B. A note on the mean value theorem for convex functions. (Italian summary) **(82b:26007)**
- Ioffe, Alexandre D. Sous-différentielles approchées de fonctions numériques. (English summary) **(82e:49026)**
- Linke, Ju. E. Application of Steiner's point for investigation of a class of sublinear operators. (Russian) **(82e:90000)**
- Meise, Reinhold See Colombeau, Jean-François, **(82k:46037)**
- Michor, P. Manifolds of smooth maps. **(82b:58022a)**
- Nachbin, Leopoldo ★ Introduction to functional analysis: Banach spaces and differential calculus. **(82i:58002)**
- Németh, A. B. Some differential properties of the convex mappings. **(82k:46066)**
- Nurminkii, E. A. On the differentiability of set-valued mappings. (Russian. English summary) **(82d:26015)**
- Panagiotopoulos, P. D. Nonconvex superpotentials in the sense of F. H. Clarke and applications. **(82m:73029)**
- Papaghiuc, Neculai Variétés différentiables modélées sur des espaces de Fréchet; l'intégration des champs de vecteurs. **(82d:58006)**
- Penot, Jean-Paul On the existence of Lagrange multipliers in nonlinear programming in Banach spaces. **(82m:90141)**
- A characterization of tangential regularity. **(82k:41030)**
- Pian, J. (with Sharma, C. S.) The variational principle for the scattering phase. **(82c:58017)**
- Rogers, Alice A global theory of supermanifolds. **(82d:58001)**
- Schöpf, Peter Konvexitätsfreie Abbildungen. **(82b:52007)**
- Seituk, V. N. On the existence of a Fréchet derivative for an operator that is defined by a system of nonlinear singular integral equations. (Russian) **(82m:45012)**
- Sharma, C. S. See Pian, J., **(82c:58017)**
- Smirnov, E. I. Nonoblateness of a cone in a locally convex space. (Russian) **(82c:46009)**
- Spingarn, Jonathan E. Submonotone subdifferentials of Lipschitz functions. **(82g:26016)**
- Thibault, Lionel Cônes tangents et épi-différentiels de fonctions vectorielles. **(82b:26015)**
- Tijs, S. H. (with Borwein, J. M.) Some generalizations of Carathéodory's theorem via barycentres, with application to mathematical programming. **(82a:90086)**
- Zhang, Gong Qing Variational methods for nondifferentiable functionals and their applications to partial differential equations. **(82h:35025)**

58C25 Differentiable maps

- Corach, Gustavo (with Larotonda, Angel Rafael) Differentiable compactifications. (Spanish) **82i:58017**
- Damon, James Topological properties of real simple germs, curves, and the nice dimensions $n > p$. **82g:58014**
- Elroyson, Gustave A. (with Swartz, Blair; Wendroff, Burton) A new inequality for symmetric functions. **82c:58018**
- Frölicher, Alfred Applications lisses entre espaces et variétés de Fréchet. (English summary) [Smooth maps between Fréchet spaces and manifolds] **82k:58017**
- Himiasvili, G. N. Level surfaces of a smooth function on a manifold with corners. (Russian. Georgian and English summaries) **82m:58007**
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- Larotonda, Angel Rafael See Corach, Gustavo, **82i:58017**
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- Németh, A. B. The comparison of the Michal-Bastiani and of the Clarke subdifferential. (Romanian summary) **82k:58019**
- Swartz, Blair See Elroyson, Gustave A.; et al., **82c:58018**
- Szegő, G. P. (with Treccani, Giulio) What you should know about real-valued functions but were afraid to ask. **82c:58019**
- Tougeron, Jean-Claude Fonctions composées différentiables: cas algébrique. **82e:58020**
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58C27 Singularities of differentiable maps [See also 14B05, 14E15, 32Bxx, 32C40, 32C45.]

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- (with Giblin, P. J.) On real simple singularities. **82a:58012**
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- Damon, James Finite determinacy and topological triviality. I. **82i:58018**
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- See also Bruce, J. W., **82a:58012**
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- (Hilton, Peter) See Lu, Yung Chen, **82j:58021**
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- Bass, D. W. Topologically versal deformations of matrices; codimension at most two. (82c:58030)
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- Bierstone, Edward (with Schwarz, Gérard W.) Division et prolongement de fonctions C^∞ . (English summary) (82a:32013)
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- von Borzeszkowski, Horst-Heino (with Paul, H.) On caustics and singularities in general relativity. (German summary) (82f:83059)
- Brjuno, A. D. ★Локальный метод нелинейного анализа дифференциальных уравнений. (Russian) [A local method of nonlinear analysis for differential equations] (82b:34033)
- Bruce, J. W. (with Giblin, P. J.) A stratification of the space of plane quartic curves. (82j:14022)
- Burnat, M. Supersonic nozzles without shocks. (Polish and Russian summaries) (82m:76040)
- Chua, Leon O. See Matsumoto, Takashi; et al., (82f:94029)
- Cleave, John P. The form of the tangent-developable at points of zero torsion on space curves. (82a:53002)
- Čmutov, S. V. Monodromy groups of singularities of functions of two variables. (Russian) (82i:32022)
- Crowley, B. J. B. On the global nature of the semiclassical wavefunction describing elastic scattering in several coordinate dimensions. (82i:81037)
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- Damon, James Topological properties of real simple germs, curves, and the nice dimensions $n > p$. (82g:58014)
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- Donato, Paul Caractérisation du groupe fondamental d'une variété par l'action transitive du revêtement universel de son groupe de difféomorphismes. (English summary) [Characterization of the fundamental group of a manifold by the transitive action of the universal covering space of its group of diffeomorphisms] (82j:58031)
- Giblin, P. J. See Bruce, J. W., (82j:14022)
- Golubitsky, Martin (with Schaeffer, David G.) A singularity theory approach to steady-state bifurcation theory. (82a:58018)
- Gorjunov, V. V. Cohomology of braid groups of series C and D. (Russian) (82k:20085)
- Himšišvili, G. N. On the local degree of a smooth mapping. (Russian. English summary) (82a:58009)
- Hutchinson, John E. Fractals and self-similarity. (82h:49026)
- Ichiraku, Shigeo See Matsumoto, Takashi; et al., (82f:94029)
- Jänich, Klaus Symmetry properties of certain C^∞ -functions on the 2-dimensional disk. (82a:57027)
- Kawakami, Hiroshi See Matsumoto, Takashi; et al., (82f:94029)
- Kergosien, Yannick Louis (with Thom, René) Sur les points paraboliques des surfaces. (English summary) (82a:53003a)
- See also Banchoff, Thomas F.; et al., (82a:53003b)
- Kolesov, Ju. S. A method of normal forms for systems with lag. (Russian. Lithuanian and English summaries) (82c:34085)
- Kučko, L. P. See Belickii, G. R., (82c:32012)
- Kysel, Jan Homotopy type of a space of circles tangent to a given ellipse. (Russian. Slovak and English summaries) (82f:55015)
- Levantovskii, L. V. Singularities of the boundary of a region of stability. (Russian. English summary) (82h:34069)
- Lisjanoi, V. F. The normal form of nonautonomous systems. (Russian) (82m:34037)
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- Petrovskii, G. N. Matrices that commute with their partial derivatives. (Russian. English summary) (82i:58007)
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- Ronga, Felice On multiple points of smooth immersions. (82d:57018)
- Roska, Tamás The limits of modeling of nonlinear circuits. (82a:94101)
- Rousseau, Christiane Formes normales des matrices rectangulaires dans un topos et applications. (82k:18004)
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- Sattinger, D. H. Group representation theory, bifurcation theory and pattern formation. (82f:58034)
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- Sjöstrand, Johannes Reflection of analytic singularities. (See 81e:81003)
- Suzuki, Masahiko Normal forms of quasihomogeneous functions with inner modality equal to five. (82h:32018)
- Tape, Walter Analytic foundations of halo theory. (82b:78002)
- Thom, René See Kergosien, Yannick Louis, (82a:53003a) and Banchoff, Thomas F., (82a:53003b)
- Togawa, Yoshio A geometric study of the D-stability problem. (82a:15018)
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- Trotman, D. J. A. See Navarro Aznar, V., (82j:58009)
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- Verdera, Joan Finitely generated, projective extensions of an m -convex algebra. (Spanish) (82i:46073)
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- Katětov, Miroslav (with Jedlička, Pavel) Catastrophe theory: coherence and application. I. (Czech) 82a:58014
- (with Jedlička, Pavel) Catastrophe theory: coherence and application. II. (Czech) 82a:58015
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- Schaeffer, David G. See Golubitsky, Martin; et al., 82i:58010
- Stewart, Ian Catastrophe theory and equations of state: conditions for a butterfly singularity. 82a:58016
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- Anderson, S. G. See Bader, Richard F. W.; et al., (82h:81149a)
- Apter, Michael J. On the concept of bistability. (82i:92002)
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- (Hilton, Peter) See Lu, Yung Chen, (82j:58021)
- Ho, Thomas (with Saunders, Anthony) A catastrophe model of bank failure. (82m:90022)
- Holmes, Philip J. See Chillingworth, D. R. J., (82a:58035)
- Hui, David (with Hansen, Jörn S.) The parabolic umbilic catastrophe and its application in the theory of elastic stability. (82j:73037)
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- Junusov, M. S. See Askarov, B.; et al. (82h:82040)
- Keller, Karl Modelling critical behaviour in terms of catastrophe theory and fractal lattices. (82i:82063)
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- Kitano, Masao (with Yabuzaki, T.; Ogawa, Toru) Optical tristability. (82d:81183)
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- Mandadi, V. See Huseyin, K., (See 82d:00008)
- (Maxwell, James Clerk) See Cockbain, A. E., (82i:01070)
- Murthy, H. S. K. See Oliva, Terence A.; et al. (82d:90047)
- Nguyen-Dang, T. Tung See Bader, Richard F. W.; et al. (82h:81149b)
- Ogawa, Toru See Kitano, Masao; et al. (82d:81183)
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- Oliva, Terence A. (with Peters, Michael H.; Murthy, H. S. K.) A preliminary empirical test of a cusp catastrophe model in the social sciences. (82d:90047)
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- Rössler, Otto E. The gluing-together principle and chaos. (82g:58047)
- Saunders, Anthony See Ho, Thomas, (82m:90022)
- Schaeffer, David G. See Golubitsky, Martin; et al. (82i:80011)
- Stringer, John Operational research and public policy. (See 82k:90009)
- Tal, Yoram See Bader, Richard F. W.; et al. (82h:81149b)
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- Upstill, C. See Berry, M. V.; et al. (82h:81007)
- Voitländer, J. See Brüggemann, R., (82h:81150)
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- Wright, F. J. See Berry, M. V., (82k:78006)
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58C30 Fixed point theorems [See also 47H10.]

- Shih, Weishu Une remarque sur le degré d'une application continue et les équations aux dérivées partielles avec condition intégrale. (English summary) 82j:58029
- Stachó, László L. On the existence of fixed points of holomorphic automorphisms. (Italian summary) 82f:58022
- Watson, Layne T. (with Yang, Wei H.) Optimal design by a homotopy method. 82h:58021
- Yang, Wei H. See Watson, Layne T., 82h:58021

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- Appell, Jürgen Ein Abbildungsgrad für approximierbare Operatoren in Banachräumen. (82d:47073)
- Bobylov, N. A. Regular and critical points of continuous functions. (Russian) (82k:90095)
- Bryszewski, J. (with Górniewicz, L.; Prusko, Tadeusz) An application of the topological degree theory to the study of the Darboux problem for hyperbolic equations. (82f:35127)
- Canfora, Albino Topological degree theory for a class of noncompact operators in a Hilbert space. (Italian) (82d:47071)
- Cohen, Daniel I. A. On the Kakutani fixed point theorem. (82h:90102)
- Cromme, Ludwig J. Sind Fixpunktverfahren effektiv? (English summary) (82m:65049)
- De Blasi, F. S. Generic properties for some classes of operator equations. (82d:47055)
- Engles, Charles R. Economic equilibrium under deformation of the economy. (82d:90028)

- Garcia, C. B. (with Li, Tien Yien) On a path following method for systems of equations. (82f:65060)
- Georg, Kurt A simplicial deformation algorithm with applications to optimization, variational inequalities and boundary value problems. (82h:65045)
- Górniewicz, L. See Bryszewski, J.; et al. (82f:35127)
- Gould, F. J. Recent and past developments in the simplicial approximation approach to solving nonlinear equations—a subjective view. (82h:90097)
- Kuhn, Harold W. On the Shapley-Sperner lemma. (82h:90101)
- Li, Tien Yien See Garcia, C. B., (82f:65060)
- Mininni, Michele (with Muni, Giuseppe) A degree theory with respect to a pseudo-inner product in a locally convex vector space. (82h:47085)
- Mock, M. S. A topological degree for orbits connecting critical points of autonomous systems. (82f:35126)
- Muni, Giuseppe See Mininni, Michele, (82h:47085)
- Prusko, Tadeusz See Bryszewski, J.; et al. (82f:35127)
- Shih, Mou Hsiang Location of the zeros of continuously differentiable maps. (82h:55003)
- Stewart, Ian Bifurcation and hysteresis varieties for the thermal-chainbranching model with a negative modal parameter. (82g:58018)
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- Todd, Michael J. Numerical stability and sparsity in piecewise-linear algorithms. (82h:65050)
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- Zabrejko, P. P. On the homotopy theory of periodic vector fields. (Russian) (82h:55004)

58C35 Integration on manifolds; measures on manifolds [See also 28Cxx.]

- Uglanov, A. V. Surface integrals and differential equations on an infinite-dimensional space. (Russian) 82k:58026
- Surface integrals in a Banach space. (Russian) 82k:58025

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- Romanov, V. A. Limits of differentiable measures in Hilbert space. (Russian) (82e:46061)

58C40 Spectral theory; eigenvalue problems

- Shibutani, Norimasa Nonlinear eigenvalue problems associated with subdifferentials. 82j:58030
- Stanton, Robert J. (with Weinstein, Alan D.) On the L^4 norm of spherical harmonics. 82d:58015
- Weinstein, Alan D. Nonlinear stabilization of quasimodes. 82d:58016
- See also Stanton, Robert J., 82d:58015

secondary classifications:

- Bahri, Abbas (with Berestycki, Henri) Points critiques de perturbations de fonctionnelles paires et applications. (English summary) (82f:35055)
- Bates, Peter W. Solutions of nonlinear elliptic systems with meshed spectra. (82a:47056)
- Berestycki, Henri See Bahri, Abbas, (82f:35055)
- Cerami, Giovanna On the existence of eigenvalues for a nonlinear boundary value problem. (Italian) (82f:35150)
- Conti, Giuseppe (with Iannacci, Rita) Using a nonlinear spectral theory to solve boundary value problems. (82k:34018)
- Georg, Kurt On tracing an implicitly defined curve by quasi-Newton steps and calculating bifurcation by local perturbations. (82k:58031)
- Gibbon, John (with McGuinness, Mark J.) Amplitude equations at the critical points of unstable dispersive physical systems. (82m:35127)
- Golubitsky, Martin (with Schaeffer, David G.) A singularity theory approach to steady-state bifurcation theory. (82a:58018)
- Iannacci, Rita See Conti, Giuseppe, (82k:34018)
- Jürgens, Hartmut (with Peitgen, Heinz-Otto; Saupe, Dietmar) Topological perturbations in the numerical study of nonlinear eigenvalue and bifurcation problems. (82e:65063)
- McGuinness, Mark J. See Gibbon, John, (82m:35127)
- Peitgen, Heinz-Otto See Jürgens, Hartmut; et al., (82e:65063)
- Petryshyn, W. V. On the solvability of $x \in Tx + \lambda Fx$ in quasiconvex cones with T and F k -set-contractive. (82f:47074)
- Sattinger, D. H. Group representation theory, bifurcation theory and pattern formation. (82f:58034)
- Saupe, Dietmar See Jürgens, Hartmut; et al., (82e:65063)
- Schaeffer, David G. See Golubitsky, Martin, (82a:58018)

58C99 None of the above, but in this section

- Dmitruk, A. V. (with Miljutin, A. A.; Osmolovskii, N. P.) Ljusternik's theorem and the theory of the extremum. (Russian) 82c:58010
- Miljutin, A. A. See Dmitruk, A. V.; et al., 82c:58010
- Osmolovskii, N. P. See Dmitruk, A. V.; et al., 82c:58010

secondary classifications:

- Marques, Maria Higinia Rendeiro Vector distributions on manifolds as indicatrices of continuous linear mappings. (Portuguese) (82a:46042)
- Mawhin, Jean Generalized multiple Perron integrals and the Green-Goursat theorem for differentiable vector fields. (82m:26010)
- Notri, Takashi Semicontinuity and weak-continuity. (82f:54018)
- O'Farrell, Anthony G. Point derivations on an algebra of Lipschitz functions. (82g:46096)

58Dxx Spaces and manifolds of mappings (including nonlinear versions of 46Exx)

58D05 Groups of diffeomorphisms and homeomorphisms as manifolds [See also 22E65, 57Q05.]

Donato, Paul Caractérisation du groupe fondamental d'une variété par l'action transitive du revêtement universel de son groupe de difféomorphismes. (English summary) [Characterization of the fundamental group of a manifold by the transitive action of the universal covering space of its group of diffeomorphisms] **82j:58031**

Ismagilov, R. S. On the group of volume-preserving diffeomorphisms. (Russian) **82f:58023**

Lukacki, A. M. On the curvature of the group of measure-preserving diffeomorphisms of an n -dimensional torus. (Russian) **82j:58032**

Takens, Floris Characterization of a differentiable structure by its group of diffeomorphisms. **82e:58027**

secondary classifications:

Abe, Kōjun On the homotopy types of the groups of equivariant diffeomorphisms. (82b:57029)

Bardos, Claude (with Bercovier, Michel; Pironneau, Olivier) Vortex method with finite element for the Euler equation. (82c:76026)

Bercovier, Michel See **Bardos, Claude**; et al., (82c:76026)

Ismagilov, R. S. Imbedding of a group of measure-preserving diffeomorphisms into a semidirect product and its unitary representations. (Russian) (82b:22027)

Laudenbach, F. Présentation du groupe de difféotopies d'une surface compacte orientable. (See 82m:57003)

Michor, P. Manifolds of smooth maps. II. The Lie group of diffeomorphisms of a noncompact smooth manifold. (82b:58022b)

Ōmori, Hideki ★Mugen jigen ri gunron. (Japanese) [Theory of infinite-dimensional Lie groups] (82k:58001)

Pironneau, Olivier See **Bardos, Claude**; et al., (82c:76026)

Poénaru, V. Quelques rappels sur les difféomorphismes des surfaces. (See 82m:57003)

58D07 Groups and semigroups of nonlinear operators [See also 17B65, 47Dxx, 47H20.]

58D10 Spaces of imbeddings and immersions

secondary classifications:

Binz, E. (with Fischer, H. R.) The manifold of embeddings of a closed manifold. (82g:58019)

Epstein, Marcelo (with Segev, Reuven) Differentiable manifolds and the principle of virtual work in continuum mechanics. (82d:73008)

Fischer, H. R. See **Binz, E.**, (82g:58019)

McDuff, Dusa Foliations and monoids of embeddings. (82m:57014)

Michor, P. Manifolds of smooth maps. III. The principal bundle of embeddings of a noncompact smooth manifold. (82b:58022c)

See also **Binz, E.**; et al., (82g:58019)

Rigdon, Robert (with Williams, Bruce) Embeddings and immersions of manifolds. (82j:57031)

Segev, Reuven See **Epstein, Marcelo**, (82d:73008)

Williams, Bruce See **Rigdon, Robert**, (82j:57031)

Yau, Shing Tung The total mass and the topology of an asymptotically flat space-time. (82e:83023)

58D15 Manifolds of mappings [See also 54C35.]

Binz, E. Two natural metrics and their covariant derivatives on a manifold of embeddings. **82h:58011**

(with Fischer, H. R.) The manifold of embeddings of a closed manifold.

82g:58019

Chu, C. I. See **Lee, Y. L.**; et al., **82k:58027**

Fischer, H. R. See **Binz, E.**, **82g:58019**

Gromov, Mikhael L. Homotopical effects of dilatation. **82d:58017**

Lee, Y. L. (with Chu, C. I.; Miao, L. C.) On spaces of $C(r, s)$ differentiable maps. **82k:58027**

Miao, L. C. See **Lee, Y. L.**; et al., **82k:58027**

Michor, P. Manifolds of smooth maps. **82b:58022a**

Manifolds of smooth maps. II. The Lie group of diffeomorphisms of a

noncompact smooth manifold. **82b:58022b**

Manifolds of smooth maps. III. The principal bundle of embeddings of a

noncompact smooth manifold. **82b:58022c**

See also **Binz, E.**; et al., **82g:58019**

Schmid, Rudolf Manifolds of mappings. **82i:58020**

secondary classifications:

Bogovskii, M. E. See **Maslennikova, V. N.**, (82i:46052)

Exner, P. (with Kolerov, G. I.) On Hilbert spaces of paths. (82j:81026)

Frölicher, Alfred Catégories cartésiennement fermées engendrées par des monoïdes. (82i:18008)

Hansen, Vagn Landsgaard On spaces of maps of n -manifolds into the n -sphere. (82c:55014)

Kolerov, G. I. See **Exner, P.**, (82j:81026)

Kunita, Hiroshi Some extensions of Itô's formula. (82k:60131)

Lockhart, Robert B. Fredholm properties of a class of elliptic operators on noncompact manifolds. (82j:35050)

Maslennikova, V. N. (with Bogovskii, M. E.) Sobolev spaces of solenoidal vector fields. (Russian) (82i:46052)

Mayer-Wolf, E. Isometries between Banach spaces of Lipschitz functions. (82e:46036)

58D17 Manifolds of metrics (esp. Riemannian)

Babelon, O. (with Viallet, C.-M.) The Riemannian geometry of the configuration space of gauge theories. **82m:58013**

Blair, David E. On the space of Riemannian metrics on surfaces and contact manifolds. **82f:58024**

Viallet, C.-M. See **Babelon, O.**, **82m:58013**

secondary classifications:

Audoumet, Jacques (with Bancel, Daniel) Sets with spatial boundary and existence of submanifolds with prescribed mean extrinsic curvature of a Lorentzian manifold. (82m:53066)

Ballmann, W. (with Thorbergsson, G.; Ziller, W.) Closed geodesics and the fundamental group. (82j:58041)

Bancel, Daniel See **Audoumet, Jacques**, (82m:53066)

Eichhorn, J. The topological structure of connection spaces. (See 82j:53062)

Hiscock, William A. Models of evaporating black holes. I. (82h:83035a)

Models of evaporating black holes. II. Effects of the outgoing created radiation. (82h:83035b)

Isham, C. J. Topological θ -sectors in canonically quantized gravity. (82j:83025)

Kuwahara, Ritshi On the characterization of flat metrics by the spectrum. (82k:58095a) Correction to: "On the characterization of flat metrics by the spectrum". (82k:58095b)

Meyer, Daniel Courbure des sommes de métriques. (English summary) (82m:53044)

Muhometov, R. G. On a problem of reconstructing Riemannian metrics. (Russian) (82m:53071)

Taubes, Clifford Henry The existence of multimagnetic solutions to the nonabelian, Yang-Mills-Higgs equations for arbitrary simple gauge groups. (82j:81043)

Thorbergsson, G. See **Ballmann, W.**; et al., (82j:58041)

Ziller, W. See **Ballmann, W.**; et al., (82j:58041)

58D20 Measures (Gaussian, cylindrical, etc.) on manifolds of maps [See 28Cxx.]

secondary classifications:

Cooper, Alan (with Feldman, Joel; Rosen, Lon) Legendre transforms and r -particle irreducibility in quantum field theory: the formalism for $r=1, 2$. (82m:81047)

Feldman, Joel See **Cooper, Alan**; et al., (82m:81047)

Foias, Ciprian (with Temam, Roger) Homogeneous statistical solutions of Navier-Stokes equations. (82g:35097)

Gaveau, Bernard (with Trauber, Philip) Constructions de diffusions et de mesures invariantes par le groupe de jauge sur l'espace des connexions. (82c:81042)

Lascar, Bernard Le noyau de l'équation des ondes sur une variété riemannienne compacte comme intégrale de chemins. (82f:58080)

Rosen, Lon See **Cooper, Alan**; et al., (82m:81047)

Temam, Roger See **Foias, Ciprian**, (82g:35097)

Trauber, Philip See **Gaveau, Bernard**, (82c:81042)

58D25 Equations in function spaces; evolution equations [See also 34Gxx, 35K22, 35R15.]

Audoumet, Jacques (with Bancel, Daniel) Sur l'existence des hypersurfaces lorentziennes à courbure donnée. (English summary) [On the existence of Lorentzian hypersurfaces with given curvature] **82j:58033**

Bancel, Daniel See **Audoumet, Jacques**, **82j:58033**

Chaljub-Simon, Alice (with Choquet-Bruhat, Yvonne) Global solutions of the

Lichnerowicz equation in general relativity on an asymptotically Euclidean complete manifold. **82f:58025**

Choquet-Bruhat, Yvonne (with York, James W., Jr.) The Cauchy problem. **82k:58028**

See also **Chaljub-Simon, Alice**, **82f:58025**

Daleckiĭ, Ju. L. Composite multiplicative integral of a formal power series. (Russian) **82f:58026**

Kunita, Hiroshi On the representation of solutions of stochastic differential equations. **82e:58028**

Minea, Gheorghe The linear first integrals of the Euler equations. **82g:58020**

York, James W., Jr. See **Choquet-Bruhat, Yvonne**, **82k:58028**

secondary classifications:

Adebiyi, A. On the existence of steady helical vortex tubes of small cross-section. (82m:76014)

Agemi, Rentaro The initial-boundary value problem for inviscid barotropic fluid motion. (82j:35124)

Arsen'ev, A. A. An example of the Kubo-Martin-Schwinger state for a nonlinear classical Poisson system with an infinite-dimensional phase space. (Russian) (82k:82003)

Baxendale, Peter Wiener processes on manifolds of maps. (82e:58102)

Belinskii, V. A. (with Fargion, D.) Two-soliton waves in anisotropic cosmology. (Italian summary) (82f:83020)

Bellini-Morante, Aldo ★Applied semigroups and evolution equations. (82f:47001)

Bemelmans, J. $C^{0,\alpha}$ -semigroups for flows past obstacles and for flows with capillary surfaces. (82c:35064)

Bergmann, Peter G. (with Komar, Arthur) The phase space formulation of general relativity and approaches toward its canonical quantization. (82g:83012)

Bohm, Michael ★On a nonlinear evolution equation. (82k:34068)

- von Borzeszkowski, Horst-Heino (with Paul, H.) On caustics and singularities in general relativity. (German summary) (82b:83059)
- Brakke, Kenneth A. ★The motion of a surface by its mean curvature. (82c:49035)
- Bray, Marcel Solutions conformes à celles de Taub en relativité générale. (English summary) (82c:83013)
- Brill, Dieter R. (with Cavallo, John M.; Isenberg, James A.) K -surfaces in the Schwarzschild space-time and the construction of lattice cosmologies. (82b:83076)
- Brockett, Roger W. (with Clark, J. M. C.) The geometry of the conditional density equation. (82j:93047)
- Brusin, V. A. Global stability and dichotomy of a class of nonlinear systems with random parameters. (Russian) (82i:60106)
- Capinski, Marek (with Szafirski, Boleslaw) Statistical solutions of differential equations in turbulent heat transfer. (Russian summary) (82m:80001)
- Carfora, Mauro Zero-lapse loci in asymptotically flat maximally foliated spacetime manifolds. (82c:83035)
- Cavallo, John M. See Brill, Dieter R.; et al., (82b:83076)
- Clark, J. M. C. See Brockett, Roger W., (82j:93047)
- Coll, Bartolomé Sur la détermination initiale des champs de Killing admis par un espace-temps. (English summary) (82d:83027)
- Dalec'kii, Ju. L. (with Fomin, S. V.) Differential equations for distributions in infinite-dimensional spaces. (Russian) (82c:46054)
- (De Finis, Francesco) See Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, (82b:83002)
- Derski, Włodzimierz (with Kowalski, Stefan J.) On the motion and mass continuity equations in a porous fluid-saturated medium. (French and Russian summaries) (82i:73005)
- Dimock, J. Algebras of local observables on a manifold. (82i:81071)
- (Einstein, Albert) See Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, (82b:83002)
- Fargion, D. See Belinskii, V. A., (82f:83020)
- Fischer, Arthur E. (with Marsden, Jerrold E.; Moncrief, Vincent) The structure of the space of solutions of Einstein's equations. I. One Killing field. (82d:83007)
- Folias, Ciprian A survey on the functional dynamical system generated by the Navier-Stokes equations. (82c:35065)
- Fomin, S. V. See Dalec'kii, Ju. L., (82c:46054)
- Fursikov, A. V. See Visk, M. I., (82g:35095)
- Galloway, Gregory J. On the topology of Wheeler universes. (82b:83022)
- Gravel, Pierre Asymptotic regularizations as an alternative to distributions for the study of singular hypersurfaces. (82j:83040)
- Halilsoy, M. A method for generating new solutions in general relativity. (82i:83018)
- Howell, Kenneth B. Periodic and "slightly" periodic boundary value problems in elastostatics on bodies bounded in all but one direction. (82i:73009)
- Ichinose, Takashi A product formula and its application to the Schrödinger equation. (82a:47039)
- d'Inverno, R. A. (with Smallwood, J.) Covariant 2+2 formulation of the initial value problem in general relativity. (82c:83011)
- Isenberg, James A. The construction from initial data of spacetimes with nontrivial spatial and bundle topology. (82j:83014)
- See also Brill, Dieter R.; et al., (82b:83076)
- Jantzen, Robert T. Conformal geometry and spatially homogeneous cosmology. (82i:83019)
- Joshi, N. E. See Saraykar, R. V., (82f:83010)
- Komar, Arthur See Bergmann, Peter G., (82g:83012)
- Kowalski, Stefan J. See Derski, Włodzimierz, (82i:73005)
- Krener, Arthur J. (with Loby, Claude) The complexity of stochastic differential equations. (82j:60107)
- Künzle, H. P. (with Savage, J. R.) A global analysis approach to the general relativistic fluid ball problem. (82g:83016)
- Lal, K. B. (with Maurya, B. R.) On wave solutions of the field equations of Einstein's, Bonnor's and Schrödinger's nonsymmetric unified theories. (Turkish summary) (82c:83066)
- Lipsczy, Zsolt Boundary value problems of mixed type with nonsmooth boundaries. I. Elliptic case. (Hungarian. English summary) (82m:35025a)
- Boundary value problems of mixed type with nonsmooth boundaries. II. Parabolic case. (Hungarian. English summary) (82m:35025b)
- Lippner, Gy. First order stochastic dynamics of one-dimensional infinite point systems. (82b:60117)
- Loby, Claude See Krener, Arthur J., (82j:60107)
- Ludwig, Garry Asymptotic behavior of gravitational fields in a type II coordinate system. (82c:83030)
- Makarenko, N. I. Justification of a three-dimensional model of shallow water. (Russian) (82c:76012)
- Marsden, Jerrold E. (with Tipler, Frank J.) Maximal hypersurfaces and foliations of constant mean curvature in general relativity. (82d:83048)
- See also Fischer, Arthur E.; et al., (82d:83007)
- Mathews, P. M. (with Seetharaman, M.; Takahashi, Yasushi) On the degree of the minimal equation of the matrices in first-order relativistic wave equations. (82g:81037)
- Maurya, B. R. See Lal, K. B., (82c:83066)
- Meetz, Kurt Finite energy solutions for interacting Yang-Mills and Dirac fields on Minkowski space. (82i:81041a)
- Errata: "Finite energy solutions for interacting Yang-Mills and Dirac fields on Minkowski space". (82e:81041b)
- Moncrief, Vincent See Fischer, Arthur E.; et al., (82d:83007)
- Moschetti, Gaetano Homothetic solutions of Einstein's equations and shock waves. (82f:83057)
- Müller-Hoissen, Folkert Determinism in space-time. (82i:83054)
- Ne'eman, Yuval Gravity, groups, and gauges. (82f:83089)
- Nelson, Robert A. Coordinate-dependent 3+1 formulation of the general relativity equations for a perfect fluid. (82d:83046)
- Neugebauer, Gernot Relativistic gravitational fields of rotating bodies. (82j:83006)
- Nicolai, H. Supersymmetry and functional integration measures. (82c:81148)
- Orsjanik, L. V. Abstract form of the Cauchy-Kowalewski theorem and its application. (Russian) (82b:35007)
- Paneitz, S. M. (with Segal, I. E.) Quantization of wave equations and Hermitian structures in partial differential varieties. (82g:81040)
- (Pantaleo, Mario) See Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein, (82b:83002)
- Paul, H. See von Borzeszkowski, Horst-Heino, (82f:83059)
- Pelii, V. O. Correctness of the formulation of the Cauchy problem for the Einstein equations and the theory of systems of reference. (Ukrainian. Russian summary) (82f:83009)
- Procopius, Gh. The Cauchy problem in relativistic theory of radiation field. (82c:83042)
- Theorem of existence and uniqueness in relativistic radiative hydrodynamics. (Romanian summary) (82i:83048)
- Ricceri, Biagio Existence of solutions for ordinary differential equations in Banach spaces under Carathéodory hypotheses. (Italian. English summary) (82j:34069)
- Rosen, Gerald A remarkable operator version of the Navier-Stokes equation. (82g:35093)
- Saraykar, R. V. (with Joshi, N. E.) Linearization stability of Einstein equations coupled with self-gravitating scalar fields. (82f:83010)
- Savage, J. R. See Künzle, H. P., (82g:83016)
- Seetharaman, M. See Mathews, P. M.; et al., (82g:81037)
- Segal, I. E. See Paneitz, S. M., (82g:81040)
- Smallwood, J. See d'Inverno, R. A., (82c:83011)
- Stumbles, Sian M. Hypersurfaces of constant mean extrinsic curvature. (82g:83007)
- Szafirski, Boleslaw See Capinski, Marek, (82m:80001)
- Takahashi, Tadayasu On the pseudoparabolic regularization of the generalized Korteweg-de Vries equation. (82g:35114)
- Takahashi, Yasushi See Mathews, P. M.; et al., (82g:81037)
- Tipler, Frank J. See Marsden, Jerrold E., (82d:83048)
- Visik, M. I. (with Fursikov, A. V.) ★Математические задачи статистической гидромеханики. (Russian) [Mathematical problems of statistical hydromechanics] (82g:35095)
- Wald, Robert M. Dynamics in nonglobally hyperbolic, static space-times. (82f:83015)
- Xanthopoulos, Basilis C. Gribov vacua and Einstein space-times. (82b:81076)
- Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein ★Relativity, quanta, and cosmology in the development of the scientific thought of Albert Einstein. Vol. I, II. (82b:83002)

58D30 Applications (in quantum mechanics (Feynman path integrals), relativity, fluid dynamics, etc.)

- Bhagwat, K. V. See Khandekar, D. C.; et al., 82m:58014
- Khandekar, D. C. (with Lawande, S. V.; Bhagwat, K. V.) Path integration of a Lagrangian related to an electron gas in a random potential. 82m:58014
- Lawande, S. V. See Khandekar, D. C.; et al., 82m:58014

secondary classifications:

- Albeverio, Sergio (with Hoegh-Krohn, Raphael) Some Markov processes and Markov fields in quantum theory, group theory hydrodynamics and C^* -algebras. (82j:60127)
- Aref'eva, I. Ja. Nonabelian Stokes formula. (Russian. English summary) (82a:53034)
- Bach, Alexander Entropy, action and the Onsager-Machlup function. (See 82g:82004)
- Becchi, C. (with Rouet, A.; Stora, R.) Renormalizable theories with symmetry breaking. (82i:81099)
- Bekenstein, Jacob D. (with Parker, Leonard) Path-integral evaluation of Feynman propagator in curved spacetime. (82f:81024)
- Cavellieri, G. (with Spinelli, G.) Field-theoretic approach to gravity in the flat space-time. (82c:83060)
- Clark, T. E. (with Menikoff, Ralph; Sharp, David H.) Quantum mechanics on the half-line using path integrals. (82b:81032)
- Clarke, C. J. S. See Tipler, Frank J.; et al., (82j:83046)
- Dekker, H. Proof of the path integral representation of the nonlinear Fokker-Planck equation by means of Fourier series. (82b:81018)
- On the path integral for diffusion in curved spaces. (82b:82036)
- Path integrals in Riemannian spaces. (82c:81041)
- DeWitt-Morette, C. (with Elworthy, K. D.; Nelson, B. L.; Sammelman, G. S.) A stochastic scheme for constructing solutions of the Schrödinger equations. (82m:81028)
- Ellis, G. F. R. See Tipler, Frank J.; et al., (82j:83046)
- Elworthy, K. David (with Truman, Aubrey) The classical limit of quantum mechanics in a curved space background. (82b:81043) See DeWitt-Morette, C.; et al., (82m:81028)
- Exner, P. (with Kolerov, G. I.) On Hilbert spaces of paths. (82j:81026)
- (with Kolerov, G. I.) Path-integral expression of dissipative dynamics. (82b:81044)
- Friedrich, H. On the regular and the asymptotic characteristic initial value problem for Einstein's vacuum field equations. (82c:83002)
- Garrido, Luis (with Lurié, D.; San Miguel, M.) Stochastic quantization and path integral formulation of Fokker-Planck equation. (82c:81035)
- Gauthier, Serge (with Rouet, A.) Pure Yang-Mills perturbation theory in the instanton sector compared to the zeroth sector. (Italian and Russian summaries) (82b:81078)
- Gateau, Bernard (with Trauber, Philip) Une approche rigoureuse à la quantification locale du champ de Yang-Mills avec cut-off. (English summary) (82k:81051)
- Hasslacher, Brosl (with Perry, Malcolm J.) Spin networks are simplicial quantum gravity. (82f:83046)
- Hoegh-Krohn, Raphael See Albeverio, Sergio, (82j:60127)
- Isenberg, James A. Wheeler-Einstein-Mach spacetimes. (82b:83007)
- Joshi, N. E. See Saraykar, R. V., (82f:35155) and (82f:83010)
- Kaiser, Hans Jürgen Nonperturbative treatment of functional integrals for quantum field theory. (See 82i:81004b)

- Kay, Bernard S. Mathematical aspects of quantum field theory in curved space-time. (82i:81103)
- Klauder, John R. Path integrals. (82g:81023)
Path integrals for affine variables. (82h:81023)
Path integrals, stationary phase approximations and complex histories. (82d:81047)
- Kodama, T. See Santos, F. C.; et al., (82i:81049)
- Kolerov, G. I. See Exner, P., (82h:81044) and (82j:81026)
- Koppel, A. Some aspects of methods of generating exact axially symmetric stationary solutions of the Einstein equations. (Russian. Estonian and English summaries) (82f:83023a)
(with Lember, T.) Nonrelativistic analysis of methods of generating axially symmetric stationary solutions of the Einstein equations. (Russian. Estonian and English summaries) (82f:83023b)
- Künzle, H. P. (with Savage, J. R.) Equilibrium configurations of fluids in general relativity. (82h:83044)
(with Savage, J. R.) On the uniqueness of the equilibrium configurations of slowly rotating relativistic fluids. (82h:83044)
- Kuo, Hui Hsiung Fourier-Wiener transform on Brownian functionals. (82f:60178)
- Kuratsuji, Hiroshi (with Mizobuchi, Yutaka) A semiclassical treatment of path integrals for the spin system. (82j:81027)
- Langouche, F. (with Rockaerts, D.; Tirapegui, Enrique) On quantization and point canonical transformations in phase-space functional integrals. (82h:81036)
- Leibler, S. (with Orland, H.) Functional integral methods for quantum spin systems. (82k:82014)
- Lember, T. See Koppel, A., (82f:83023b)
- Lu, Qi Keng (with Yin, Wei Ping) The solution of the Cauchy problem for a wave equation with variable coefficients. (Chinese. English summary) (82i:35104)
- Ludwig, Garry On asymptotic flatness. (82h:83025)
- Lukackii, A. M. On the curvature of the group of measure-preserving diffeomorphisms of an n -dimensional torus. (Russian) (82j:58032)
- Lurié, D. See Garrido, Luis; et al., (82c:81035)
- Marsden, Jerrold E. (with Tipler, Frank J.) Maximal hypersurfaces and foliations of constant mean curvature in general relativity. (82d:83048)
- Menikoff, Ralph See Clark, T. E.; et al., (82h:81032)
- Mizobuchi, Yutaka See Kuratsuji, Hiroshi, (82j:81027)
- Mizrahi, Maurice M. Correspondence rules and path integrals. (Italian and Russian summaries) (82f:81027)
- Nelson, B. L. See DeWitt-Morette, C.; et al., (82m:81028)
- Nicola, H. A transformation formula for integrals over superfields. (82h:81138)
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- Saraya, R. V. (with Joshi, N. E.) Nondissipative hydromagnetic flows: existence and some properties. (82f:35155)
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- Savage, J. R. See Künzle, H. P., (82h:83044) and (82h:83044)
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- Schwartz, Laurent Les semi-martingales formelles. (82i:60093)
- Sharp, David H. See Clark, T. E.; et al., (82h:81032)
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- Yin, Wei Ping See Lu, Qi Keng, (82i:35104)
- Zambini, J.-C. Covariant Lagrangian of Onsager and Machlup without discretization. (82g:82027)
- Zwanziger, Daniel Covariant quantization of gauge fields without Gribov ambiguity. (82k:81062)

58D99 None of the above, but in this section

secondary classifications:

- Abe, Kōjun On the homotopy types of the groups of equivariant diffeomorphisms. (82h:57029)

- Anosov, D. V. Homology in the space of closed curves on an n -dimensional sphere. (Russian) (82m:58020)
- Bogačev, B. M. See Kiprijanov, I. A., (82m:46031)
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- Gurtin, Morton E. ★Topics in finite elasticity. (82i:73022)

58E05 Abstract critical point theory (Morse theory, Ljusternik-Schnirelman (Šnirel'man) theory, etc.)

- Antoine, P. Lemme de Morse et calcul des variations. 82d:58018
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- Berestycki, Henri See Bahri, Abbas, 82h:58023
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- Chow, Shui Nee (with Kurtz, J. C.) Singular nonlinear equations on an unbounded interval. 82f:58027
- Ekeland, Ivar (with Lasry, Jean-Michel) Problèmes variationnels non convexes en dualité. (English summary) 82g:58021
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- Lasry, Jean-Michel See Ekeland, Ivar, 82g:58021
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- Pitcher, Everett Counting compatible boundary conditions. 82c:58029
- Struwe, Michael Infinitely many critical points for functionals which are not even and applications to superlinear boundary value problems. 82c:58030
- Suvorov, S. G. Critical sets of mappings of Banach spaces into Euclidean spaces. (Russian) 82h:58025
Letter to the editors: "On the Ljusternik-Šnirel'man theory" [Sibirsk. Mat. Ž. 19 (1978), no. 3, 670-684; MR 81j:58027]. (Russian) 82c:58012
- Uhlenbeck, K. Morse theory by perturbation methods with applications to harmonic maps. 82c:58029
- Zaslavskii, A. Ja. Critical points of Lipschitz functions on smooth manifolds. (Russian) 82c:58031
- Zhang, Gong Qing Solutions of asymptotically linear operator equations via Morse theory. 82m:58015

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- Amann, Herbert (with Zehnder, Eduard) Nontrivial solutions for a class of nonresonance problems and applications to nonlinear differential equations. (82h:47077)
(with Zehnder, Eduard) Periodic solutions of asymptotically linear Hamiltonian systems. (82i:58026)
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- Bahri, Abbas (with Berestycki, Henri) Points critiques de perturbations de fonctionnelles paires et applications. (English summary) (82f:35055)
(with Berestycki, Henri) A perturbation method in critical point theory and applications. (82j:35059)
- Bais, F. Alexander The topology of monopoles crossing a phase-boundary. (82h:81108)
- Berestycki, Henri Le nombre de solutions de certains problèmes semi-linéaires elliptiques. (English summary) (82k:35033)
See also Bahri, Abbas, (82f:35055) and (82j:35059)
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- Golubitsky, Martin (with Keyfitz, Barbara Lee; Schaeffer, David G.) A singularity theory analysis of a thermal-chainbranching model for the explosion peninsula. (82h:58010)
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- Weber, Helmut (with Werner, W.) On the numerical solution of some finite-dimensional bifurcation problems. (82h:65044)
- Werner, W. See Weber, Helmut, (82h:65044)
- Willem, Michel Variational methods and almost solvability of semilinear equations. (82h:47062)
- Yahata, Hideo A simple model for the Taylor vortex flow. (82j:76040)
- Yamaguti, Masaya See Fujii, Hiroshi, (82c:73044)
- Zaleski, S. See Pomeau, Y., (82h:76017)
- Zehnder, Eduard See Amann, Herbert, (82b:47077)
- Zeragija, D. P. On branching of solutions to the problem of stability of rods experiencing joint action of compression and torsion. (Russian) (82k:73038)
- Ziglin, S. L. Branching of solutions and the nonexistence of an additional first integral in the problem of an asymmetric heavy rigid body in motion relative to a fixed point. (Russian) (82c:70005)
- Garmisch-Partenkirchen ★Pattern formation by dynamic systems and pattern recognition. (82k:00028)
- Pattern formation by dynamic systems and pattern recognition ★Pattern formation by dynamic systems and pattern recognition. (82k:00028)
- Pattern recognition ★Pattern formation by dynamic systems and pattern recognition. (82k:00028)
- Symposium:
Synergetics ★Pattern formation by dynamic systems and pattern recognition. (82k:00028)
- Synergetics ★Pattern formation by dynamic systems and pattern recognition. (82k:00028)

58E10 Applications to the theory of geodesics (problems in one independent variable)

- Alexander, Ralph (with Alexander, Stephanie) Geodesics in Riemannian manifolds-with-boundary. 82j:58040
- Alexander, Stephanie See Alexander, Ralph, 82j:58040
- Anosov, D. V. Homology in the space of closed curves on an n -dimensional sphere. (Russian) 82m:58020
- Ballmann, W. (with Thorbergsson, G.; Ziller, W.) Closed geodesics and the fundamental group. 82j:58041
- Berger, M. S. (with Bombieri, E.) On Poincaré's isoperimetric problem for simple closed geodesics. 82c:58023
- Bombieri, E. See Berger, M. S., 82c:58023
- Breuneval, Jacques (with Pécaut-Tison, Françoise) Actions libres et isométriques sur les variétés à géodésiques toutes fermées de même longueur. (English summary) 82c:58034
- Gromoll, Detlef (with Grove, Karsten) On metrics on S^2 all of whose geodesics are closed. 82m:58021
- Grove, Karsten See Gromoll, Detlef, 82m:58021
- Hayashi, Kiyoshi Geodesics starting and ending orthogonally to a submanifold. 82a:58020
- Klingenberg, Wilhelm Closed geodesics. 82a:58021
On the existence of closed geodesics on spherical manifolds. 82d:58024
- Kurogi, Tetsunori On some types of geodesics on Riemannian manifolds. 82c:58024
- Matthias, Hans-Heinrich ★Zwei Verallgemeinerungen eines Satzes von Gromoll und Meyer. (German) [Two generalizations of a theorem of Gromoll and Meyer] 82a:58022
- Pécaut-Tison, Françoise See Breuneval, Jacques, 82c:58034
- Thorbergsson, G. See Ballmann, W.; et al., 82j:58041
- Trümper, Manfred Un principe variationnel pour les géodésiques affines et le transport de Jacobi d'une forme de Pfaff. (English summary) 82c:58016
- Ziller, W. See Ballmann, W.; et al., 82j:58041

secondary classifications:

- Bangert, Victor On the existence of escaping geodesics. (82g:58071)
- Bothe, H. G. Der Satz von Hopf und Rinow für unendlichdimensionale Mannigfaltigkeiten. (82k:58013)
- Eberlein, Patrick Geodesics and ends in certain surfaces without conjugate points. (82c:53070)
- Ferraris, Carlos J. On the resolution of degenerate closed geodesics. (82a:53049)
- Gromov, Mikhail L. Homotopical effects of dilatation. (82d:58017)
- Grove, Karsten The geometric and topological significance of curvature and diameter. (See 82i:00012)
- Klingenberg, Wilhelm Stable and unstable motions on surfaces. (82h:58067)
- Matsumoto, Koji Infinitesimal variations of invariant hypersurfaces of a P -Sasakian manifold. (82f:53058a)
Infinitesimal variations of invariant hypersurfaces of a P -Sasakian manifold. II. (82f:53058b)
- Ralston, James V. Correction: "Approximate eigenfunctions of the Laplacian" [J. Differential Geom. 12 (1977), no. 1, 87-100; MR 57 # 10741]. (82a:58053)

58E11 Critical metrics

- Bleeker, David D. Critical Riemannian manifolds. **82g:58024**
 Patterson, E. M. A class of critical Riemannian metrics. **82m:58022**

secondary classifications:

- Bujalo, S. V. Stability of the topology of hyperbolic space forms under variation of the curvature. (Russian) **(82e:53063)**

58E12 Applications to minimal surfaces (problems in two independent variables)

- Böhme, Reinhold A Plateau problem with many solutions for boundary curves in a given knot class. **82m:58023**
 Dierkes, Ulrich ★ Isoperimetrische Variationsprobleme. (German) [Isoperimetric variational problems] **82m:58024**
 Sacks, Jonathan (with Uhlenbeck, K.) The existence of minimal immersions of 2-spheres. **82f:58035**
 Shikata, Yoshihiro On a lower bound of the numbers of minimal surfaces. **82b:58032**
 Uhlenbeck, K. See Sacks, Jonathan, **82f:58035**

secondary classifications:

- do Carmo, Manoel P. Stability of minimal submanifolds. **(82k:53073)**
 Fischer-Colbrie, D. Some rigidity theorems for minimal submanifolds of the sphere. **(82b:53078)**
 Rasmias, Themistocles M. Global analysis of the Morse-Smale index for a minimal immersion in \mathbb{R}^n , $n \geq 3$ and its application to the classification problem of unstable minimal immersions. **(82i:53007)**
 Schöffler, Karlheinz Stabilität mehrfach zusammenhängender Minimalflächen. (English summary) **(82e:49060)**
 Simon, Leon Regularity of capillary surfaces over domains with corners. **(82d:49043)**
 Tausch, Engelbert The n -dimensional least area problem for boundaries on a convex cone. **(82e:53014)**

58E15 Application to extremal problems in several variables

- Nožička, F. Konvexität und konvexe Optimierungsprobleme in gekrümmten Räumen. **82a:58035**
 Ragionieri, Rodolfo (with Ricci, Riccardo) Hamiltonian formalism in the calculus of variations. (Italian summary) **82g:58025**
 Ricci, Riccardo See Ragionieri, Rodolfo, **82g:58025**

secondary classifications:

- Almgren, Frederick J., Jr. See Thurston, R. N., **(82c:82089)**
 Audoumet, Jacques (with Bancel, Daniel) Sur l'existence des hypersurfaces lorentziennes à courbure donnée. (English summary) [On the existence of Lorentzian hypersurfaces with given curvature] **(82j:58033)**
 Bancel, Daniel See Audoumet, Jacques, **(82j:58033)**
 Boerner, Hermann Variationsrechnung à la Carathéodory und das Zermelo'sche Navigationsproblem. **(82e:49019)**
 Gromov, Mikhael L. Homotopical effects of dilatation. **(82d:58017)**
 Schoen, Richard (with Simon, Leon) Regularity of stable minimal hypersurfaces. **(82k:49054)**
 Simon, Leon See Schoen, Richard, **(82k:49054)**
 Thurston, R. N. (with Almgren, Frederick J., Jr.) Liquid crystals and geodesics. (French summary) **(82c:82089)**
 Tulczyjew, W. M. The Euler-Lagrange resolution. **(82g:58005)**

58E17 Pareto optimality, etc., applications to economics

secondary classifications:

- Blad, Michael C. Exchange of stability in a disequilibrium model. **(82j:90016)**
 Chichilnisky, Graciela Social choice and the topology of spaces of preferences. **(82m:90010)**
 Structural instability of decisive majority rules. **(82k:90021)**
 Dierker, Egbert (with Dierker, Hildegard; Trockel, Walter) Smoothing demand by aggregation with respect to wealth. **(82a:90014)**
 Dierker, Hildegard See Dierker, Egbert; et al., **(82a:90014)**
 Donaldson, John B. (with Selden, Larry) A note on the recoverability and uniqueness of changing tastes. **(82m:90005)**
 Fuchs, Gérard Dynamics of expectations in temporary general equilibrium theory. **(82g:90020)**
 Keenan, Donald Uniqueness and global stability in general equilibrium theory. **(82j:90017)**
 Kehoe, Timothy J. An index theorem for general equilibrium models with production. **(82i:90012)**
 Kreps, David M. Arbitrage and equilibrium in economies with infinitely many commodities. **(82m:90038)**
 Schneider, David Walrasian analysis via strategic outcome functions. **(82b:90022)**
 Selden, Larry See Donaldson, John B., **(82m:90005)**
 Stumbles, Sian M. Hypersurfaces of constant mean extrinsic curvature. **(82g:83007)**
 Trockel, Walter See Dierker, Egbert; et al., **(82a:90014)**

58E20 Harmonic maps

- Bott, Raoul Equivariant Morse theory and the Yang-Mills equation of Riemann surfaces. **82e:58035**

- Bourguignon, Jean-Pierre (with Lawson, H. Blaine, Jr.) Stability and isolation phenomena for Yang-Mills fields. **82g:58026**
 Eells, James (with Lemaire, L.) A report on harmonic maps. **82b:58033**
 (with Lemaire, L.) Deformations of metrics and associated harmonic maps. **82a:58023**
 Fuglede, Bent Harmonic morphisms between Riemannian manifolds. **82b:58034**
 Gu, Chao Hao On the Cauchy problem for harmonic maps defined on two-dimensional Minkowski space. **82g:58027**
 On the initial-boundary value problem for harmonic maps from the 2-dimensional Minkowski space. **82g:58028**
 Guo, Han Ying Gauge theory and functional harmonic mapping. **82m:58025**
 Hildebrandt, Stefan (with Jost, Jürgen; Widman, K.-O.) Harmonic mappings and minimal submanifolds. **82d:58025**
 Jost, Jürgen ★ Eindeutigkeit harmonischer Abbildungen. (German) [Uniqueness of harmonic mappings] **82k:58036**
 Univalence of harmonic mappings between surfaces. **82b:58013**
 Ein Existenzbeweis für harmonische Abbildungen, die ein Dirichletproblem lösen, mittels der Methode des Wärmeflusses. (English summary) **82f:58036**
 See also Hildebrandt, Stefan; et al., **82d:58025**
 Kikuchi, Norio On the nonlinear parabolic equation of Eells-Sampson and a harmonic mapping with boundary condition. **82i:58025**
 Lawson, H. Blaine, Jr. See Bourguignon, Jean-Pierre, **82g:58026**
 Lemaire, L. See Eells, James, **82a:58023** and Eells, James, **82b:58033**
 Lichnerowicz, André Sur les tenseurs holomorphes d'une variété kählérienne compacte. (English summary) **82k:58037**
 Nishikawa, Seiki On the existence of global solutions of the nonlinear parabolic equation of Eells-Sampson over product manifolds. **82b:58014**
 Peetre, Jaak On Hadamard's variational formula. **82f:58037**
 Puzhnikov, A. I. Harmonic mappings of Riemann surfaces and foliated manifolds. (Russian) **82g:58029**
 Sealey, H. C. J. Harmonic maps of small energy. **82m:58026**
 Tóth, Gábor On homotopy classes of mappings into flat Riemannian manifolds. **82k:58038**
 Widman, K.-O. See Hildebrandt, Stefan; et al., **82d:58025**
 Wood, John C. On the holomorphicity of harmonic maps from a surface. **82m:58027**
 Xin, Y. L. Topology of certain submanifolds in the Euclidean sphere. **82e:58036**

secondary classifications:

- Beckenbach, Edwin F. The formulas of Weierstrass and the fundamental theorem of algebra for minimal surfaces. **(82c:53009)**
 Bicadze, A. V. A system of nonlinear partial differential equations. (Russian) **(82h:35011)**
 Boboc, Nicu On the extension of harmonic mappings. (Romanian) **(82b:31021)**
 Bott, Raoul Morse theory and the Yang-Mills equations. **(82d:14009)**
 Bourguignon, Jean-Pierre Les variétés de dimension 4 à signature non nulle dont la courbure est harmonique sont d'Einstein. **(82g:53051)**
 Boutaleb-Joutei, H. (with Chakrabarti, Amitabha; Comtet, A.) Gauge field configurations in curved space-times. II. **(82e:81062)**
 Boya, Luis J. (with Mateos, Juan) The kink: real Hopf bundle and Morse theory. **(82g:81050)**
 Brill, Dieter R. (with Jang, Pong Soo) The positive mass conjecture. **(82h:83048)**
 Burban, I. M. (with Jacun, V. A.) Meronlike configurations in a classical nonabelian Higgs model. **(82h:81083)**
 Chakrabarti, Amitabha See Boutaleb-Joutei, H.; et al., **(82e:81062)**
 Chern, Shiing Shen General relativity and differential geometry. (See **82d:83002**)
 Comtet, A. See Boutaleb-Joutei, H.; et al., **(82e:81062)**
 Cosenza, Guido (with Neri, Filippo) On the instability in nonabelian gauge theories with constant magnetic flux. **(82j:81040)**
 Demetrios, Christodoulou Solutions globales des équations de Yang et Mills. (English summary) [Global solutions of the Yang-Mills equations] **(82k:58089)**
 Dendziński, Andrzej Classification of certain compact Riemannian manifolds with harmonic curvature and nonparallel Ricci tensor. **(82e:53033)**
 Din, A. M. (with Zakrzewski, W. J.) General classical solutions in the CP^{n-1} model. **(82f:81041)**
 Eells, James On the surfaces of Delaunay and their Gauss maps. **(82b:53052)**
 Fröhlich, Jürg (with Morchio, G.; Strocchi, F.) Higgs phenomenon without a symmetry breaking order parameter. **(82a:81021)**
 Gimbre, Jean (with Velo, Giorgio) Global existence of coupled Yang-Mills and scalar fields in $(2+1)$ -dimensional space-time. **(82e:81080)**
 Girotti, H. O. (with Rothe, H. J.) Comments about θ -vacua and topology of the SU_2 Yang-Mills theory. (Italian and Russian summaries) **(82d:81079)**
 Golo, V. L. (with Putko, B. A.) Application of the Lund-Regge method to the chiral $CP(n)$ -model. (Russian. English summary) **(82i:81083)**
 Horiatsu, M. (with Rothe, K. D.; Schroer, Bert) Still more about the fermion determinant in two-dimensional QED. **(82b:81065b)**
 Hsu, J. P. (with Xin, M. D.) Incompatibility of unitarity and gauge symmetry in the $SL(2, \mathbb{C})$ Yang-Mills field theory. **(82g:81056)**
 Hudaverdjan, O. M. (with Švarc, A. S.) Multiplicative functionals and gauge fields. (Russian. English summary) **(82f:81063)**
 Itoh, Mitsuhiro Moduli of anti-self-dual connections on Kähler manifolds. **(82g:53041)**
 Jacun, V. A. See Burban, I. M., **(82h:81083)**
 Jafarizadeh, M. A. (with Snyder, M.; Tze, Hsiung Chia) Quaternionic multi- S^4 instantons in general covariant $SU(2)$ Yang-Mills and $HP(n)$ σ -models. **(82c:81083)**
 Jang, Pong Soo See Brill, Dieter R., **(82h:83048)**
 Janušauskas, A. I. On Lewy's theorem on Hessian zeros of a harmonic function. (Russian) **(82c:35015)**
 Kafiev, Ju. N. Four-dimensional σ -models and geometry of Yang-Mills fields. **(82g:81058)**
 Kerner, Richard Covariant objects and invariant equations on fiber bundles. **(82d:81053)**
 Mateos, Juan See Boya, Luis J., **(82g:81050)**

- Milnor, Tilla Klotz The energy 1 metric on harmonically immersed surfaces. (82j:53101)
- Morchio, G. See Fröhlich, Jürg, et al., (82a:81021)
- Neri, Filippo See Cosenza, Guido, (82j:81040)
- Niemi, Antti Gribov vacuum copies and interpolation in the Coulomb and Landau gauges of $SU(N)$ Yang-Mills theories. (82i:81093)
- Page, Don N. A periodic but nonstationary gravitational instanton. (82e:83020)
- Patrascioiu, Adrian More about the fermion determinant in two-dimensional QED. (82b:81065a)
- Percacci, Roberto Global definition of nonlinear sigma model and some consequences. (82j:81050)
- Putko, B. A. See Goto, V. L., (82i:81083)
- Römer, H. Atiyah-Singer index theorem and quantum field theory. (82g:81063)
- Rothe, H. J. See Girotti, H. O., (82d:81079)
- Rothe, K. D. See Hortaçsu, M.; et al., (82b:81065b)
- Sacks, Jonathan (with Uhlenbeck, K.) The existence of minimal immersions of 2-spheres. (82j:58035)
- Schoen, Richard (with Yau, Shing Tung) The energy and the linear momentum of space-times in general relativity. (82j:83045)
- Schroeder, Bert See Hortaçsu, M.; et al., (82b:81065b)
- Snyder, M. See Jafarizadeh, M. A.; et al., (82c:81083)
- Strocchi, F. See Fröhlich, Jürg, et al., (82a:81021)
- Štarc, A. S. See Hudaverdjan, O. M., (82f:81063)
- Thibault, Lionel Calcul sous-différentiel et calcul des variations en dimension infinie. (82e:49043)
- Tze, Hsiung Chia See Jafarizadeh, M. A.; et al., (82c:81083)
- Uhlenbeck, K. Morse theory by perturbation methods with applications to harmonic maps. (82k:58029)
- See also Sacks, Jonathan, (82f:58035)
- Velo, Giorgio See Ginihre, Jean, (82c:81080)
- Weder, Ricardo Rigorous results on the Yang-Mills-Higgs equations. (82g:81066)
- Wood, John C. An extension theorem for holomorphic mappings. (82d:32021)
- Xanthopoulos, Basilis C. Harmonic maps and self-dual $SU(3)$ gauge fields. (82g:81067)
- Xin, M. D. See Hsu, J. P., (82g:81056)
- Yau, Shing Tung See Schoen, Richard, (82j:83045)
- Zakrzewski, W. J. See Din, A. M., (82f:81041)
- Kagel ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)

Proceedings:
Summer School on Yang-Mills Equations ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)

Summer School:

Yang-Mills Equations ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)

Yang-Mills equations ★Proceedings of the Summer School on Yang-Mills Equations. (82j:53062)

58E25 Applications to control theory (optimal and nonoptimal)

secondary classifications:

Casti, John L. Bifurcations, catastrophes, and optimal control. (82d:49017)

58E30 Variational principles

Bruzzo, Ugo Variational characterization of torsionless connections on Riemannian manifolds. (82j:58042)

Dedecker, P. (with Tulczyjew, W. M.) Spectral sequences and the inverse problem of the calculus of variations. (82i:58038)

Gutkin, D. Espace des jets et calcul des variations en dimension infinie. (82f:58039)

Tulczyjew, W. M. See Dedecker, P., (82f:58038)

secondary classifications:

Abellanas, L. (with Galindo, A.) Quasi-Lagrangian systems. (82b:35004)

Aldaya, Victor (with de Azcárraga, José A.) Geometric formulation of classical mechanics and field theory. (82i:70017)

Ali, M. K. (with Somorjai, R. L.) On the integrability of three equal masses interacting through Morse-type potentials. (82e:58037)

Anderson, Ian M. (with Duchamp, T.) On the existence of global variational principles. (82d:58027)

de Azcárraga, José A. See Aldaya, Victor, (82i:70017)

Chevalier, Yvon Application des contraintes et des déformations de polarisation à l'étude des milieux composites. I. Formulation générale. (English summary) (82i:73011)

Duchamp, T. See Anderson, Ian M., (82d:58027)

Epstein, Marcelo (with Segev, Reuven) Differentiable manifolds and the principle of virtual work in continuum mechanics. (82d:73008)

Galindo, A. See Abellanas, L., (82b:35004)

Gladus, V. D. Five-dimensional theory of interacting scalar, electromagnetic, and gravitational fields. (Russian) (82e:83036)

Hunt, Katharine L. C. (with Ross, John) Path integral solutions of stochastic equations for nonlinear irreversible processes: the uniqueness of the thermodynamic Lagrangian. (82f:82028)

Jackiw, R. (with Manton, N. S.) Symmetries and conservation laws in gauge theories. (82d:81103)

Jantzen, Robert T. Variational principles in cosmology. (Italian and Russian summaries) (82c:83033)

Kijowski, Jerzy On a purely affine formulation of general relativity. (82j:83054)

Lagache, Jean-Marie Treillis de volume minimal dans une région donnée. (English summary) [Minimum volume design of trusses in a given region] (82b:73061)

Manton, N. S. See Jackiw, R., (82d:81103)

Mignot, Fulbert (with Puel, Jean-Pierre; Suquet, Pierre-M.) Flambage des plaques

élastiques multiperforées. (82f:73016)

Otsu, Hideharu See Watanabe, Tadashi, (82f:81055)

Peiffer, K. (with Rouche, N.) La représentation mathématique des forces et les principes de la mécanique. (82k:70003)

Prasad, M. K. (with Rossi, Paolo) Construction of exact Yang-Mills-Higgs multimonomials of arbitrary charge. (82g:81062)

Puel, Jean-Pierre See Mignot, Fulbert; et al., (82f:73016)

Rabinowitz, Paul H. On periodic solutions of Hamiltonian systems of ordinary differential equations. (See 82m:34003)

Ross, John See Hunt, Katharine L. C., (82f:82028)

Rossi, Paolo See Prasad, M. K., (82g:81062)

Rouche, N. See Peiffer, K., (82k:70003)

Schechter, Martin (with Weder, Ricardo) A theorem on the existence of dyon solutions. (82b:81095)

Schlieder, S. Some remarks on charges and their conservation in a classical SU_2 Yang-Mills theory. (Italian and Russian summaries) (82i:81096)

Segev, Reuven See Epstein, Marcelo, (82d:73008)

Somorjai, R. L. See Ali, M. K., (82e:58037)

Suquet, Pierre-M. See Mignot, Fulbert; et al., (82f:73016)

Szapiro, T. Geodesic fields in the calculus of variations of multiple integrals depending on derivatives of higher order. (82e:49015)

Triantafyllidis, N. Bifurcation phenomena in pure bending. (82c:73039)

Watanabe, Tadashi (with Otsu, Hideharu) Vortices in two-dimensional anisotropic σ -models. (82f:81055)

Weder, Ricardo See Schechter, Martin, (82b:81095)

58E35 Variational inequalities (global problems)

58E99 None of the above, but in this section

Pian, J. (with Sharma, C. S.) The variational principle for the scattering phase. (82e:58017)

Sharma, C. S. See Pian, J., (82e:58017)

secondary classifications:

Brézis, Haim (with Coron, Jean-Michel) Periodic solutions of nonlinear wave equations and Hamiltonian systems. (82g:35007)

Chang, T. S. (with Nicoll, J. F.; Young, J. E.) A closed-form differential renormalization-group generator for critical dynamics. (82b:82026)

Coron, Jean-Michel See Brézis, Haim, (82g:35007)

Fröhlich, Jürg (with Pfister, Charles Edouard) On the absence of spontaneous symmetry breaking and of crystalline ordering in two-dimensional systems. (82m:82009)

Hartle, J. B. (with Sorkin, Rafael D.) Boundary terms in the action for the Regge calculus. (82j:83024)

Hong Tuan, R. Generalizing some properties of short range classical solutions to Yang-Mills theory. (82c:81108)

Manton, N. S. An alternative action for lattice gauge theories. (82b:81062)

Nicoll, J. F. See Chang, T. S.; et al., (82b:82026)

Pfister, Charles Edouard See Fröhlich, Jürg, (82m:82009)

Pyž, V. M. The geometric approach to the problem of strong interactions. II. Conformal invariance. (Russian) (82f:81079b)

Saryčev, A. V. Index of second variation of a control system. (Russian) (82f:49020)

Sorkin, Rafael D. See Hartle, J. B., (82b:83024)

Young, J. E. See Chang, T. S.; et al., (82b:82026)

58Fxx Ordinary differential equations on manifolds; dynamical systems [For abstract and topological dynamics, see also 28D10, 34C35, 34C40, 54H20.]

Irwin, M. C. ★Smooth dynamical systems. (82c:58018)

Chaotic phenomena in deterministic systems and dynamical system theory ★Chaotic phenomena in deterministic systems and dynamical system theory. (Japanese) (82h:58015)

Random systems and dynamical systems ★Random systems and dynamical systems. (82k:58039)

Symposium:

Chaotic Phenomena in Deterministic Systems and Dynamical System Theory

★Chaotic phenomena in deterministic systems and dynamical system theory. (Japanese) (82h:58015)

Random Systems and Dynamical Systems ★Random systems and dynamical systems. (82k:58039)

secondary classifications:

Barone, Mário, Jr. See de Mello, Alcileia A. H., (82a:58001)

D'Ambrosio, Ubiratan The concept of time and dynamical implications. (82j:00014)

Hale, Jack K. ★Ordinary differential equations. (82c:34001)

Mees, Alistair I. ★Dynamics of feedback systems. (82c:34033)

de Mello, Alcileia A. H. (with Barone, Mário, Jr.) ★Equações diferenciais. Uma introdução aos sistemas dinâmicos. (Portuguese) [Differential equations. An introduction to dynamical systems] (82a:58001)

(Šapiro, V. D.) See Nonlinear and turbulent processes in physics, (82c:82002)

(Sečenko, V. I.) See Nonlinear and turbulent processes in physics, (82c:82002)

(Szűcs, J.) See American Mathematical Society Translations, Ser. 2, (82f:00004)

Winfree, Arthur T. ★The geometry of biological time. (82c:92003)

American Mathematical Society Translations, Ser. 2 ★American Mathematical Society Translations, Ser. 2, Vol. 116. (82f:00004)

Dynamical systems ★American Mathematical Society Translations, Ser. 2, Vol. 116. (82f:00004)

Kiev ★Nonlinear and turbulent processes in physics. (82c:82002)
 Nonlinear and turbulent processes in physics ★Nonlinear and turbulent processes in physics. (82c:82002)
 Physics ★Nonlinear and turbulent processes in physics. (82c:82002)
 Workshop:
 Nonlinear and Turbulent Processes in Physics ★Nonlinear and turbulent processes in physics. (82c:82002)

58F05 Hamiltonian and Lagrangian systems; symplectic geometry [See also 70Hxx.]

- Abarbanel, Henry D. I. (with Crawford, John David) Diffusion in very chaotic Hamiltonian systems. 82c:58019
- Ali, M. K. (with Somorjai, R. L.) Reappearance of ordered motion in some nonintegrable Hamiltonian systems. 82d:58026
 (with Somorjai, R. L.) On the integrability of three equal masses interacting through Morse-type potentials. 82c:58037
- Amann, Herbert (with Zehnder, Eduard) Periodic solutions of asymptotically linear Hamiltonian systems. 82i:58026
- Ambrosetti, Antonio (with Mancini, Giovanni) Solutions of minimal period for a class of convex Hamiltonian systems. 82j:58043
- Anderson, Ian M. (with Duchamp, T.) On the existence of global variational principles. 82d:58027
- Arms, Judith M. (with Marsden, Jerrold E.; Moncrief, Vincent) Symmetry and bifurcations of momentum mappings. 82m:58028
- Beljaev, A. V. Motion of a multidimensional body with a fixed point in a gravitational force field. (Russian) 82i:58027
- Benci, Vieri A geometrical index for the group S^1 and some applications to the study of periodic solutions of ordinary differential equations. 82i:58040
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- Vol'kenstein, M. V. See Livšic, M. A.; et al., (82i:92009) and Belincev, B. N.; et al., (82m:92020)
- Volkov, E. I. See Poležnev, A. A., (82j:92037)
- Vozlinskii, V. I. On numerical estimation of the region of asymptotic stability. Questions of the stability of equilibrium branching points. (Russian) (82f:93064)
- Vulpiani, Angelo See Benzi, Roberto; et al., (82k:70027)
- Weiss, N. O. See Da Costa, L. N.; et al., (82j:76041)
- Williamowski, K.-D. See Göbber, F., (82h:34052)
- Williams, Robert F. The bifurcation space of the Lorenz attractor. (82f:34061)
- Zafrañska, L. A. See Burd, V. S., (82k:92021)
- Zeng, Xian Wu See Qin, Yuan Xun, (82h:34038)
- Zisook, Albert B. Universal effects of dissipation in two-dimensional mappings. (82i:58054)
- Zlatoustov, V. A. See Galaktionova, O. O., (82g:34050)

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- Alekseev, Vladimir Mikhailovič (with Jakobson, M. V.) Symbolic dynamics and hyperbolic dynamic systems. 82j:58093
- Aranson, S. H. (with Grines, V. Z.) Homeomorphisms with minimal entropy on two-dimensional manifolds. (Russian) 82h:58037
- Benettin, Giancarlo (with Galgani, Luigi; Giorgilli, A.) Further results on universal properties in conservative dynamical systems. (Russian) 82f:58067
- Braun, Martin. Invariant curves, homoclinic points, and ergodicity in area-preserving mappings. 82f:58069
- Brin, Michael. On the spectrum of Anosov diffeomorphisms. 82e:58077
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- Devaney, Robert L. Linked twist mappings are almost Anosov. 82f:58070
- Eckmann, Jean-Pierre See Collet, Pierre; et al., 82i:58051 and 82i:58052
- Franks, John (with Williams, Robert F.) Anomalous Anosov flows. 82e:58078
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- Giorgilli, A. See Benettin, Giancarlo; et al., 82f:58067
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- Przytycki, Feliks. Construction of invariant sets for Anosov diffeomorphisms and hyperbolic attractors. 82e:58051
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- Sell, George R. See Sacker, Robert J., 82h:58040
- Shiraiwa, Kenichi (with Kurata, Masahiro) A generalization of a theorem of Marotto. 82m:58042
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- Young, Lai Sang. On the prevalence of horseshoes. 82g:58070
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- Zisook, Albert B. Universal effects of dissipation in two-dimensional mappings. 82i:58054

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- Bachelart, S. See Roux, J.-C.; et al., (82i:92010)
- Brin, Michael (with Feldman, Jacob; Katok, Anatole) Bernoulli diffeomorphisms and group extensions of dynamical systems with nonzero characteristic exponents. (82i:58042)
- Farrell, F. T. (with Jones, Lowell) New attractors in hyperbolic dynamics. (82b:58025)
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- Levi, Mark Qualitative analysis of the periodically forced relaxation oscillations. (82g:58052)
- Lewowicz, Jorge Lyapunov functions and topological stability. (82d:58032)
- Misiurewicz, Michał (with Szlenk, W.) Entropy of piecewise monotone mappings. (82a:58030)
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- Neumann, Dean A. Uncountably many distinct topologically hyperbolic equilibria in \mathbb{R}^4 . (82g:58076)
- Pesin, Ja. B. Geodesic flows with hyperbolic behavior of trajectories and objects connected with them. (Russian) (82i:58095)
- Pixton, Dennis More counterexamples to Coleman's conjecture. (82g:58077)
- Pliss, V. A. Connection between various conditions for structural stability. (Russian) (82g:58046)
- Poénaru, V. Présentation d'ensemble des théorèmes de Thurston sur les surfaces. (See 82m:57003)
- Rossi, A. See Roux, J.-C.; et al., (82i:92010)
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- Russo, Lucio See Franceschini, Valter, (82m:58038)
- Stepin, A. M. See Ahalaja, S. I., (82i:58040)
- Szlenk, W. See Misiurewicz, Michał, (82a:58030)
- Taylor, Donald Boggia Horseshoe periodic orbits in the restricted problem of three bodies for a Sun-Jupiter mass ratio. (82m:70006)
- Troger, H. Heteroklinische Punkte und das Pendel mit periodisch erregtem Aufhängepunkt. (82h:70006)
- Vidal, Christian See Roux, J.-C.; et al., (82i:92010)
- Yoccoz, Jean-Christophe See Arnoux, Pierre, (82b:57018)

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- Bangert, Victor On the existence of escaping geodesics. (82g:58071)
- Chicone, Carmen The topology of stationary curl parallel solutions of Euler's equations. (82i:58055)
- Dani, S. G. Dynamics of horospherical flows. (82d:58034)
- Igošin, V. A. See Šapiro, Ja. L., (82d:58057)
- Keane, Michael S. Geodätische Strömungen. (82b:58068)
- Pesin, Ja. B. Geodesic flows with hyperbolic behavior of trajectories and objects connected with them. (Russian) (82i:58095)
- Šapiro, Ja. L. (with Igošin, V. A.) Monomorphisms of quasigeodesic flows. (Russian) (82d:58057)
- Series, Caroline Symbolic dynamics for geodesic flows. (82f:58071)
- van Velsen, J. F. C. On the Riemann curvature of conservative systems in classical mechanics. (82g:58072)

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- Belbruno, Edward A. Regularizations and geodesic flows. (See 82k:58002)
- Fathi, Albert (with Laudenbach, F.) Les feuilletages mesurés. (See 82m:57003)
- Les feuilletages mesurés (suite). (See 82m:57003)
- (with Shub, Michael) Some dynamics of pseudo-Anosov diffeomorphisms. (See 82m:57003)
- Gromov, Mikhael L. Hyperbolic manifolds, groups and actions. (82m:53035)
- Klingenberg, Wilhelm Stable and unstable motions on surfaces. (82b:58067)
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- Masur, Howard Transitivity properties of the horocyclic and geodesic flows on moduli space. (82k:30047)
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- Classification des difféomorphismes des surfaces. (See 82m:57003)
- See also Fathi, Albert; et al., (See 82m:57003)
- Series, Caroline On coding geodesics with continued fractions. (82h:30052)
- Shub, Michael See Fathi, Albert, (See 82m:57003)

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- Camacho, César (with Sad, Paulo) Sur l'existence de courbes analytiques complexes invariants d'un champ de vecteurs holomorphe. (English summary) (82d:32006)
- Fathi, Albert (with Poénaru, V.) Théorèmes d'unicité des difféomorphismes pseudo-Anosov. (See 82m:57003)
- Gluck, Herman Dynamical behavior of geodesic fields. (82c:58052)
- Krauter, Arnold Richard Wurzel und analytische Iteration formal-biholomorpher Abbildungen. (82h:58041)

Laudenbach, F. Construction de difféomorphismes pseudo-Anosov. (See 82m:57003)

Müller, Thomas Beispiel einer periodischen instabilen holomorphen Strömung. (82b:58069)

Poénaru, V. See Fathi, Albert, (See 82m:57003)

Rees, Mary Tangentially distal flows. (82b:58070)

Sad, Paulo See Camacho, César, (82d:32006)

Schecter, Stephen (with Singer, Michael F.) Planar polynomial foliations. (82j:58096a)

(with Singer, Michael F.) Addendum to: "Planar polynomial foliations".

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Series, Caroline The Poincaré flow of a foliation. (82f:58072)

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- Bolibrub, A. A. Example of an unsolvable Riemann-Hilbert problem on $C\mathbb{P}^2$. (Russian) (82k:32066)
- Brown, Ronald (with Eells, James) Peter Stefan. (82f:01083)
- Cantwell, John (with Conlon, Lawrence) Poincaré-Bendixson theory for leaves of codimension one. (82f:57019)
- Conlon, Lawrence See Cantwell, John, (82f:57019)
- Eells, James See Brown, Ronald, (82f:01083)
- van Est, Willem T. Sur le groupe fondamental des schémas analytiques de variété à une dimension. (English summary) (82c:57014a)
- Erratum: "Sur le groupe fondamental des schémas analytiques de variété à une dimension". (82c:57014b)
- Fathi, Albert (with Laudenbach, F.) Les feuilletages mesurés. (See 82m:57003)
- Les feuilletages mesurés (suite). (See 82m:57003)
- Fried, David Fibrations over S^1 with pseudo-Anosov monodromy. (See 82m:57003)
- Golubeva, V. A. Reconstruction of a Pfaff system of Fuchs type from the generators of the monodromy group. (Russian) (82h:14008)
- Laudenbach, F. Présentation du groupe de difféotopies d'une surface compacte orientable. (See 82m:57003)
- See also Fathi, Albert, (See 82m:57003)
- Okamoto, Kazuo On the τ -function of the Painlevé equations. (82i:34005)
- (Poénaru, V.) See Fathi, Albert; et al., (See 82m:57003)
- Reich, Ludwig Analytische und fraktionale Iteration formal-biholomorpher Abbildungen und Differenzenrechnung. (82h:32011)
- Seke, Bobo Sur les structures transversalement affines des feuilletages de codimension un. (English summary) (82b:57023)
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- Fogedby, Hans C. Solitons and magnons in the classical Heisenberg chain. (82a:82005)
- Laudenbach, F. La théorie de Thurston sur les surfaces à bord. (See 82m:57003)
- Lomov, S. A. (with Safonov, V. F.) Regularization method for systems with a weak nonlinearity, in the resonance case. (Russian) (82c:34059)
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- Moser, Jürgen K. An example of a Schrödinger equation with almost periodic potential and nowhere dense spectrum. (82k:34029)
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- Blanchard, Paul (with Franks, John) The dynamical complexity of orientation-reversing homeomorphisms of surfaces. (82f:58073)
- Block, Louis (with Guckenheimer, John; Misiurewicz, Michał; Young, Lai Sang) Periodic points and topological entropy of one-dimensional maps. (82j:58097)
- Stability of periodic orbits in the theorem of Šarkovskii. (82b:58071)
- Periods of periodic points of maps of the circle which have a fixed point. (82h:58042)
- Campanino, M. (with Epstein, H.) On the existence of Feigenbaum's fixed point. (82j:58099)
- Coven, Ethan M. (with Nitecki, Zbigniew H.) Nonwandering sets of the powers of maps of the interval. (82m:58043)
- Devaney, Robert L. Genealogy of periodic points of maps of the interval. (82c:58081)
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- Fedotov, A. G. On Williams solenoids and their realization in two-dimensional dynamical systems. (Russian) (82b:58072)
- Franks, John See Blanchard, Paul, (82f:58073)
- Guckenheimer, John See Block, Louis; et al., (82j:58097)
- Libre, Jaime Sufficient conditions for a continuous map of \mathbb{R}^n into itself to have m -periodic points for all $m > 0$. (82f:58074)
- McGuire, James B. (with Thompson, Colin J.) On the universality and computation of Feigenbaum's δ . (82j:58100)
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 Shi, Song Ling On limit cycles of plane quadratic systems. 82j:58101
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- Bhattacharjee, A. See Cary, John R.; et al., 82j:58102
 Botlik, Matthew Bifurcation of periodic orbits on manifolds and Hamiltonian systems. 82d:58061
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 Ambrosetti, Antonio (with Mancini, Giovanni) Solutions of minimal period for a class of convex Hamiltonian systems. (82j:58043)
 Andersen, Kurt Munk See Sandqvist, Allan, (82a:34055) and (82i:34046)
 Aulbach, Bernd Asymptotic amplitude and phase for isochronic families of periodic solutions. (82c:34053)
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 Bolotin, S. V. (with Kozlov, V. V.) Libration in systems with many degrees of freedom. (82g:70031)
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 Kifer, Yuri The spectrum of small random perturbations of dynamical systems. (82c:60125)
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 Lutz, Robert (with Sari, Tewfik) Sur le comportement asymptotique des solutions dans un problème aux limites non linéaires. (English summary) (82i:34015)
 Mackey, Michael C. Periodic auto-immune hemolytic anemia: an induced dynamical disease. (82k:92011)

- Mancini, Giovanni See Ambrosetti, Antonio, (82j:58043)
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 Negrini, Piero See Caprino, Silvia, (82i:58051)
 Perko, L. M. Periodic orbits in the restricted problem: an analysis in the neighborhood of a 1st species-2nd species bifurcation. (82j:70010)
 Pivovarov, I. Nonconservative oscillatory systems with periodic solutions. (German summary) (82c:70022)
 Pollak, Eli (with Child, Mark S.) Classical mechanics of a collinear exchange reaction: a direct evaluation of the reaction probability and product distribution. (82c:80019)
 See also Child, Mark S., (82c:80018)
 Pyžkova, N. V. (with Sadovskii, A. P.) A method for solving the problem of isochronism of the center. (Russian) (82d:34047)
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 Sandqvist, Allan (with Andersen, Kurt Munk) Existence and uniqueness results for Liénard's equation having a dead band. (82a:34055)
 (with Andersen, Kurt Munk) Some results concerning periodic solutions of plane autonomous differential systems. (German and Russian summaries) (82f:34046)
 Saraceno, Marcos See Kramer, Peter, (82k:81001)
 Sari, Tewfik See Lutz, Robert, (82f:34015)
 Sergeev, V. S. On periodic solutions of the Euler-Poisson equations. (82k:70006)
 Stellmacher, I. Periodic orbits around an oblate spheroid. (82c:70017)
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 Wright, Jon A. See Chang, Shan Jin; et al., (82j:58067)
 Ye, Yan Qian (with Luo, Ding Jun) Qualitative investigation of a total differential equation having critical points. (Chinese summary) (82k:58078)

58F25 Flows

- Agrachev, A. A. (with Gamkrelidze, R. V.) Chronological algebras and nonstationary vector fields. (Russian) (82h:58075)
 Bronstein, I. U. (with Burdaev, V. P.) Chain recurrence and extensions of dynamical systems. (Russian) (82d:58058)
 Burdaev, V. P. See Bronstein, I. U., (82d:58058)
 Ding, Tong Ren See Zhang, Zhi Fen; et al., (82h:58043)
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 Huang, Wen Zao See Zhang, Zhi Fen; et al., (82h:58043)
 Likova, O. B. Exponential dichotomy of an invariant manifold. (Russian. English summary) (82h:58076)
 Misiurewicz, Michał On iterates of e^z . (82i:58058)
 Neumann, Dean A. Uncountably many distinct topologically hyperbolic equilibria in \mathbb{R}^4 . (82g:58076)
 Nijmeijer, Henk ★ Controllability distributions for nonlinear control systems. (82m:58046)
 Nitecki, Zbigniew H. Recurrent structure of completely unstable flows on surfaces of finite Euler characteristic. (82d:58059)
 Pixton, Dennis More counterexamples to Coleman's conjecture. (82g:58077)
 Tóth, Gábor Counterexample on nonequivalent dynamical systems which have common translation. (82h:58077)
 Zhang, Zhi Fen (with Ding, Tong Ren; Huang, Wen Zao) Answers to some questions on topological dynamical systems posed by Nemitskii. (82h:58043)

secondary classifications:

- Bonnard, Bernard (with Jurdjevic, V.; Kupka, Ivan A. K.; Sallet, G.) Systèmes de champs de vecteurs transitifs sur les groupes de Lie semi-simples et leurs espaces homogènes. (82a:93010)
 Bronstein, I. U. (with Glavan, V. A.) A theorem on the structural stability of smooth extensions of cascades. (Russian) (82c:58053)
 Citric'kii, O. E. See Husainov, D. Ja., (82h:54056)
 Conley, Charles A qualitative singular perturbation theorem. (82c:34056)
 Glavan, V. A. See Bronstein, I. U., (82c:58053)
 Guckenheimer, John (with Williams, Robert F.) Structural stability of Lorenz attractors. (82h:58055a)
 Husainov, D. Ja. (with Citric'kii, O. E.) Topological aspects of the study of the stability of A. M. Ljapunov's second method. (Russian) (82h:54056)
 Jakobson, M. V. Markov partitions for rational endomorphisms of the Riemann sphere. (82c:58049)
 Jurdjevic, V. (with Kupka, Ivan A. K.) Control systems subordinated to a group action: accessibility. (82f:93009)
 See also Bonnard, Bernard; et al., (82a:93010)
 Kupka, Ivan A. K. See Bonnard, Bernard; et al., (82a:93010) and Jurdjevic, V., (82f:93009)
 Malta, I. P. On Ω -stability of flows. (82h:58039)
 Sallet, G. See Bonnard, Bernard; et al., (82a:93010)
 Samoilenko, A. M. Necessary conditions for the existence of invariant tori of linear extensions of dynamical systems on a torus. (Russian) (82d:34057)
 Series, Caroline The Poincaré flow of a foliation. (82f:58072)
 Takens, Floris Motion under the influence of a strong constraining force. (82g:34060)
 Walker, Russell B. Conjugacies of topologically hyperbolic fixed points: a necessary condition on foliations. (82c:58080)
 Williams, Robert F. The structure of Lorenz attractors. (82h:58055b)
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58F27 Quasiperiodic flows

- Ding, Tong Ren A response to Birkhoff's conjecture. (Chinese) (82m:58047)

58F30 Perturbations

- Bass, D. W. Topological classification of endomorphisms of real line bundles. (82e:58085)

Topological classification of endomorphisms of complex line bundles. (82e:58086)

- Boyarsky, Abraham Randomness implies order. (82h:58078)
 Constantopoulos, J. P. Lie-admissible deformation of selfadjoint systems. (82g:58078)
 Hofsevikov, K. V. Short-periodic perturbations of the state vector in the method of Lie transforms. (Russian. English summary) (82i:58059)
 Lisjanoi, V. F. Formal classification of nonautonomous periodic systems. (Russian. English summary) (82i:58060)

secondary classifications:

- Arya, J. C. (with Bojadziev, G. N.) Time-dependent oscillating systems with damping, slowly varying parameters, and delay. (German summary) (82m:34075)
 Bojadziev, G. N. See Arya, J. C., (82m:34075)
 Brjuno, A. D. Divergence of a real normalizing transformation. (Russian. English summary) (82g:34046)
 Cockburn, Bernardo See Ruiz-Claeyssen, Julio, (82a:34087)
 Dobrohotov, S. Ju. (with Maslov, V. P.) The problem of reflection off the boundary for the equation and finite-zone conditionally periodic solutions. (Russian) (82a:35014)
 Doss, Halim Quelques formules asymptotiques pour les petites perturbations de systèmes dynamiques. (82a:60083)
 Hamada, Yoshiyasu The influence of external noise on a marginal or a critical equilibrium point. (82m:60128)
 Kates, Ronald E. Underlying structure of singular perturbations on manifolds. (82i:34064)
 Kopell, Nancy The singularly perturbed turning-point problem: a geometric approach. (82g:34085)
 (with Parter, Seymour V.) A complete analysis of a model nonlinear singular perturbation problem having a continuous locus of singular points. (82g:34086)
 Maslov, V. P. See Dobrohotov, S. Ju., (82a:35014)
 Parter, Seymour V. See Kopell, Nancy, (82g:34086)
 Rouhani, Raminé (with Tse, Edison) Bounding the behavior of positive dynamic systems. (82c:93005)
 Ruiz-Claeyssen, Julio (with Cockburn, Bernardo) Applications of the integral averaging bifurcation method to retarded functional-differential equations. (82a:34087)
 Rüssmann, Helmut Konvergente Reihenentwicklungen in der Störungstheorie der Himmelsmechanik. (82j:70011)
 Scheurle, Jürgen Über die Konstruktion invarianter Tori, welche von einer stationären Grundlösung eines reversiblen dynamischen Systems abzweigen. (English summary) (82c:34038)
 Šidlichovský, M. The elimination of the short periodic perturbations in the problem of two finite bodies. (Russian summary) (82k:70008)
 Svanidze, N. V. Small perturbations of an integrable dynamical system with an integral invariant. (Russian) (82d:58060)
 Tse, Edison See Rouhani, Raminé, (82c:93005)
 Zaslavskii, G. M. Statistics of energy spectra. (82i:82015)

58F35 Invariance properties

- Elkin, V. I. The algebraic approach in the theory of invariance of control systems. (Russian) (82h:58079)
 Kobussen, J. A. Transformation theory for first-order dynamical systems. (82k:58084)

secondary classifications:

- Biedenharn, L. C. A kinematical symmetry group construction of hadrons as Regge trajectories. (82h:81128)
 Cantrijn, Frans (with Sarlet, Willy) Note on symmetries and invariants for second-order ordinary differential equations. (82f:70009)
 Cariñena, José F. (with Santander, Mariano) Galilean relativistic wave equations. (82m:81041)
 Chu, Hsin A note on the exponential map of classical Lie groups & applications to linear differential systems with periodic coefficients. (82g:22007)
 Eliezer, C. J. See Prince, G. E., (82c:70008)
 Flurry, R. L., Jr. (with Siddall, T. H., III) On the group of the independent-particle Hamiltonian operator. (82j:81066)
 Fokas, A. S. (with Fuchssteiner, Benno) On the structure of symplectic operators and hereditary symmetries. (82g:58039)
 Fuchssteiner, Benno See Fokas, A. S., (82g:58039)
 González-Gascón, F. Symmetries and differential equations. III. The inverse problem. (82c:70019b)
 Symmetries of differential equations. II. (82c:70019a)
 Harnad, John (with Shnider, Steven; Vinet, Luc) Group actions on principal bundles and invariance conditions for gauge fields. (82c:53028)
 Iranzo, V. (with Llosa, Josep; Marqués, F.; Molina, A.) An exactly solvable model in predictive relativistic mechanics. I. (82m:83003)
 Kaliappan, P. (with Lakshmanan, M.) Kadomtsev-Petviashvili and two-dimensional sine-Gordon equations: reduction to Painlevé transcendents. (82h:35139)
 Lakshmanan, M. See Kaliappan, P., (82h:35139)
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 Marqués, F. See Iranzo, V.; et al., (82m:83003)
 Molina, A. See Iranzo, V.; et al., (82m:83003)
 Moser, Jürgen K. Hidden symmetries in dynamical systems. (82k:58047)
 Prince, G. E. (with Eliezer, C. J.) On the Lie symmetries of the classical Kepler problem. (82c:70008)
 Purfürst, R. Existenz einer invarianten Mannigfaltigkeit für eine Klasse von Abbildungen mit einem kleinen Parameter. (82d:34045)
 Šakirova, Ju. S. Homeomorphic transformations of cycles of the second kind. (Russian) (82h:34071)
 Santander, Mariano See Cariñena, José F., (82m:81041)
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- Shnider, Steven See Harnad, John; et al., (82c:53028)
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 Sumbatov, A. S. On the problem of determining the existence of ignorable coordinates in conservative dynamic systems. (82g:70033)
 Vinet, Luc See Harnad, John; et al., (82c:53028)
 Vladimirov, S. A. Symmetry groups of Lagrangians of chiral fields taking values in S^2 . (Russian. English summary) (82b:81100)
 Wegner, Franz J. Relations between nonlinear σ -models of various symmetries. (82a:81038)

58F40 Applications

- Chua, Leon O. (with Matsumoto, Takashi; Ichiraku, Shigeo) Correction to: "Geometric properties of resistive nonlinear n -ports: transversality, structural stability, reciprocity, and antireciprocity" [IEEE Trans. Circuits and Systems 27 (1980), no. 7, 577-603; MR 81i:58034]. 82a:58044
 Devaney, Robert L. Triple collision in the planar isosceles three-body problem. 82m:58048
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 Loparo, Kenneth A. Energy transfer in stochastic systems. 82f:58077
 Matsumoto, Takashi See Chua, Leon O.; et al., 82a:58044
 Oono, Yoshitsugu (with Osikawa, Motosige) Chaos in nonlinear difference equations. I. Qualitative study of (formal) chaos. 82b:58080
 Osikawa, Motosige See Oono, Yoshitsugu, 82b:58080

secondary classifications:

- Abdullaev, S. S. (with Zaslavskii, G. M.) Nonlinear dynamics of rays in inhomogeneous media. (82m:78020)
 Bahan'kov, A. A. The effect of the inclination of the axis of rotation of a body on the stability of its circular motion in spherically symmetric gravitational fields. (Russian. English summary) (82b:83047)
 Bahar, Leon Y. See Massimo, F. M.; et al., (82f:94020)
 Bhattacharyya, S. P. See Mitra, Sanjit K., (82b:94035)
 Bressan, Alberto On two conjectures by Hájek. (82b:49057)
 Brjuno, A. D. On periodic flybys of the Moon. (82f:70011)
 Busse, H.-G. (with Havsteen, B. H.) Network structure of a system coded by groups. (82c:92008)
 Chevallier, Dominique Géométrie des groupes de Lie et théorie newtonienne de l'inertie. (English summary) (82d:70012)
 Chua, Leon O. See Wyatt, John L., Jr.; et al., (82a:94109)
 Cronström, C. Quantization of nonabelian gauge theory. I. Gauge invariant Hamiltonian formulation. (82b:81083)
 Ertinger, Zdeněk Lagrangian manifolds in the theory of electrical circuits. (See 82a:94002)
 Fliess, Michel Fonctions causales non linéaires et indéterminées non commutatives. (English summary) (82b:93037)
 Froeschlé, C. (with Scholl, H.) The stochasticity of peculiar orbits in the 2/1 Kirkwood gap. (82d:85012)
 Gannett, Joel W. See Wyatt, John L., Jr.; et al., (82a:94109)
 Gendzwil, D. J. (with Stauffer, M. R.) Analysis of triaxial ellipsoids: their shapes, plane sections, and plane projections. (82g:52001)
 Gökner, İzzet Cem See Wyatt, John L., Jr.; et al., (82a:94109)
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 Griffiths, H. B. Triangles of triangles. (82f:51031)
 Gronski, Jan M. A criterion for classifying certain planar systems. (82j:57025)
 Hajji, Ibrahim N. (with Skelboe, Stig) Steady-state analysis of piecewise-linear dynamic systems. (82f:94018)
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 Hazewinkel, Michiel On the nonexistence of continuous canonical forms for linear dynamical systems. (82a:93029)
 (Fine) moduli (spaces) for linear systems: what are they and what are they good for? (82g:93024)
 Hermes, Henry Lie algebraic methods for the control of infinite-dimensional nonlinear evolution equations. (82g:93027)
 Hirschorn, R. M. (A, \mathfrak{g})-invariant distributions and disturbance decoupling of nonlinear systems. (82i:93057)
 Hohlov, A. S. Controllability on a jet manifold. (Russian) (82f:93008)
 Holley, Richard A. (with Stroock, Daniel W.) Diffusions on an infinite-dimensional torus. (82k:60152)
 Howard, Louis N. See Kopell, Nancy, (82j:35085)
 Ichtiaroglou, S. (with Katopodis, K.; Michalodimitrakakis, M.) General three-body problem: families of vertical critical periodic orbits. (82c:70010)
 Ingarden, Roman Stanisław (with Jamiolkowski, Andrzej) ★Mechanika klasyczna. (Polish) [Classical mechanics] (82d:70002)
 Jakubczyk, Bronisław Existence and uniqueness of realizations of nonlinear systems. (82c:93053)
 Jamiolkowski, Andrzej See Ingarden, Roman Stanisław, (82d:70002)
 Junkins, John L. (with Turner, James D.) On the analogy between orbital dynamics and rigid body dynamics. (82c:70006)
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 Kawakami, Masaaki See Shima, Masasuke; et al., (82m:93016b)
 Keener, James P. On cardiac arrhythmias: AV conduction block. (82m:92013)
 Kita, Yoshiyuki See Shima, Masasuke; et al., (82m:93016b)
 Kopell, Nancy (with Howard, Louis N.) Target patterns and horseshoes for a perturbed central-force problem: some temporally periodic solutions to reaction-diffusion equations. (82j:35085)

- Kozlov, V. V. ★Методы качественного анализа в динамике твёрдого тела. (Russian) [Methods of qualitative analysis in the dynamics of a rigid body] (82c:70002)
 Kwatny, Harry G. See Massimo, F. M.; et al., (82f:94020)
 Marsden, Jerrold E. ★Lectures on geometric methods in mathematical physics. (82j:58046)
 Massimo, F. M. (with Kwatny, Harry G.; Bahar, Leon Y.) Derivation of the Brayton-Moser equations from a topological mixed potential function. (82f:94020)
 McKenzie, R. See Szebehely, Victor, (82b:58058)
 Michalodimitrakakis, M. See Ichtiaroglou, S.; et al., (82c:70010)
 Milić, Mirko M. (with Novak, Ladislav A.) A general method of formulation of Lagrangian and anti-Lagrangian equations for nonlinear RLCMTG networks. (See 82c:94002)
 Mitra, Sanjit K. (with Bhattacharyya, S. P.) Topology equations for closed Coates' flow graph. (82c:94035)
 Novak, Ladislav A. See Milić, Mirko M., (See 82c:94002)
 Quirk, James Qualitative stability of matrices and economic theory: a survey article. (See 82g:00016)
 Rosen, Robert Dynamical similarity and the theory of biological transformations. (82f:92008)
 Ruelle, David Study of a simplicial complex related to the Wightman functions. (82j:81039)
 Strange attractors and characteristic exponents of turbulent flows. (82b:58057)
 Sandberg, Irwin W. On Newton-direction algorithms and diffeomorphisms. (See 82d:93001)
 Scholl, H. See Froeschlé, C., (82d:85012)
 Shima, Masasuke Theory of invariance and its applications. II. Canonical form. (Japanese. English summary) (82m:93016a)
 (with Kawakami, Masaaki; Kita, Yoshiyuki) Theory of invariance and its applications. III. Design of observers for nonlinear systems. (Japanese. English summary) (82m:93016b)
 Skelboe, Stig See Hajji, Ibrahim N., (82f:94018)
 Smale, Steve The prisoner's dilemma and dynamical systems associated to noncooperative games. (82i:90122)
 Stauffer, M. R. See Gendzwil, D. J., (82g:52001)
 Stroock, Daniel W. See Holley, Richard A., (82c:60152)
 Szebehely, Victor (with McKenzie, R.) Deformation of a line-element in the phase space at the triangular libration point. (82b:58058)
 Tadeusiewicz, Michał On the solvability and computation of D.C. transistor networks. (82c:94027)
 Toffoli, Tommaso Bicontinuous extensions of invertible combinatorial functions. (82a:94123)
 Tokarzowski, Jerzy The use of the state space method in the examination of dynamic properties of thyristor systems. (Polish. English, French, German and Russian summaries) (82c:93044)
 Tuckwell, Henry C. See Hanson, Floyd B., (82b:92039)
 Turner, James D. See Junkins, John L., (82c:70006)
 Vjuga, A. A. Gradient of the field of directions along the normal to the trajectory and the third integral. (Russian. English summary) (82c:85001)
 Wiegand, Frederik W. The interacting Bose fluid: path integral representations and renormalization group approach. (82b:81151)
 Winfree, Arthur T. 24 hard problems about the mathematics of 24 hour rhythms. (82g:92011)
 Wyatt, John L., Jr. (with Chua, Leon O.; Gannett, Joel W.; Gökner, İzzet Cem; Green, Douglas N.) Energy concepts in the state-space theory of nonlinear n -ports. I. Passivity. (82a:94109)
 Zare, K. Properties of the moment of inertia in the problem of three bodies. (82b:70009)
 Zaslavskii, G. M. See Abdullaev, S. S., (82m:78020)

58F99 None of the above, but in this section

- González-Gascón, F. (with Rodríguez-Camino, E.) On the first integrals of certain dynamical systems. 82g:58079
 Il'jaenko, Ju. S. (with Pjartli, A. S.) Neighborhoods of zero type imbeddings of complex tori. (Russian) 82a:58045
 Ito, Ryuichi Rotation sets are closed. 82i:58061
 Katok, Svetlana R. The estimation from above for the topological entropy of a diffeomorphism. 82a:58046
 Lutzky, M. Generalized Ray-Reid systems. 82a:58047
 McDuff, Dusa C^1 -minimal subsets of the circle. (French summary) 82b:58044
 Pjartli, A. S. See Il'jaenko, Ju. S., 82a:58045
 Rees, Mary A minimal positive entropy homeomorphism of the 2-torus. 82b:58045
 Rodríguez-Camino, E. See González-Gascón, F., 82g:58079
 Šarkovskii, O. M. Qualitative analysis of some types of differential-difference equations. 82b:58081
 Yano, Koichi A remark on the topological entropy of homeomorphisms. 82b:58082

secondary classifications:

- Boiti, M. (with Laddomada, C.; Pempinelli, F.) An equivalent real form of the nonlinear Schrödinger equation and the permutability for Bäcklund transformations. (Italian and Russian summaries) (82j:81013)
 Bronstein, I. U. (with Burdaev, V. P.) Chain recurrence and extensions of dynamical systems. (Russian) (82d:58058)
 Burdaev, V. P. See Bronstein, I. U., (82d:58058)
 Collet, Pierre (with Eckmann, Jean-Pierre) ★Iterated maps on the interval as dynamical systems. (82j:58078)
 Duncan, Tyrone E. On the steady state filtering problem for linear pure delay time systems. (82i:93066)
 Eckmann, Jean-Pierre See Collet, Pierre, (82j:58078)
 Jakubczyk, Bronisław Existence and uniqueness of nonlinear realizations. (82a:93017)

- Ladimonade, C. See Bötti, M.; et al., (82j:81013)
- Landa, P. S. ★Автоматизация в системах с конечным числом степеней свободы. (Russian) [Auto-oscillation in systems with a finite number of degrees of freedom] (82j:70001)
- Lemos, Nivaldo A. The Heisenberg picture is not privileged for the canonical quantization of dissipative systems. (82j:81042)
- Libre, Jaime Sufficient conditions for a continuous map of \mathbb{R}^n into itself to have m -periodic points for all $m > 0$. (82j:58074)
- Pempinelli, F. See Bötti, M.; et al., (82j:81013)
- Petrovskaja, I. G. TM-equivalence and classification of noncompact invariant sets of dynamical systems. (Russian) (82m:54044)
- (Thurston, William) See Travaux de Thurston sur les surfaces, (82m:57003)
- Udlov, V. V. Miniversal deformation of complex orbits of systems of "input-output" type. (Russian) (82j:93013)
- Urbanski, M. R. Commutativity of finite-dimensional subalgebras of Lie algebras of vector fields that are solenoidal in a two-dimensional domain and tangent to its boundary. (Russian) (82j:33090)
- Asterisque ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] (82m:57003)
- Travaux de Thurston sur les surfaces ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] (82m:57003)
- The works of Thurston on surfaces ★Travaux de Thurston sur les surfaces. (French) [The works of Thurston on surfaces] (82m:57003)

58Gxx Partial differential equations on manifolds; differential operators [See also 35-XX.]

- (Gindikin, S. G.) See Guillemin, Victor; et al., 82i:58085
- Guillemin, Victor (with Sternberg, Shlomo) ★Геометрические асимптотики. (Russian) [Geometric asymptotics] 82i:58085
- Sternberg, Shlomo See Guillemin, Victor, 82i:58085

secondary classifications:

- Chazarain, Jacques (with Piriou, Alain) ★Introduction à la théorie des équations aux dérivées partielles linéaires. (French) [Introduction to the theory of linear partial differential equations] (82i:35001)
- Mahammed, N. (with Piccinini, Renzo; Suter, U.) ★Some applications of topological K-theory. (82f:55009)
- Piccinini, Renzo See Mahammed, N.; et al., (82f:55009)
- Piriou, Alain See Chazarain, Jacques, (82i:35001)
- Suter, U. See Mahammed, N.; et al., (82f:55009)

58G05 Differential complexes [See also 35Nxx.]; elliptic complexes

- Choquet-Bruhat, Yvonne (with Christodoulou, Demetrios) Systèmes elliptiques sur une variété euclidienne à l'infini. (English summary) 82i:58046
- Christodoulou, Demetrios See Choquet-Bruhat, Yvonne, 82i:58046
- Friedrich, Thomas (with Sulanke, S.) Ein Kriterium für die formale Selbstadjungiertheit des Dirac-Operators. 82i:58083
- Sulanke, S. See Friedrich, Thomas, 82i:58083
- Taniguchi, Yoshiharu Normal homogeneous metrics and their spectra. 82j:58103

secondary classifications:

- Baouendi, M. S. (with Trèves, François) A property of the functions and distributions annihilated by a locally integrable system of complex vector fields. (82f:35057)
- Bulyrev, V. S. (with Nomofilov, V. E.) Asymptotic solutions of an elliptic equation system on a Riemannian manifold concentrated in the vicinity of a phase trajectory. (82m:35043)
- Gallot, Sylvestre Variétés dont le spectre ressemble à celui de la sphère. (English summary) (82j:58092)
- Greiner, Peter C. Spherical harmonics on the Heisenberg group. (82j:43009)
- Hamilton, Richard S. Deformation of complex structures on manifolds with boundary. II. Families of noncoercive boundary value problems. (82e:32035)
- Malliavin, Paul C^∞ parametrix on Lie groups and two steps factorization on convolution algebras. (82j:22019)
- Mauceri, Giancarlo Zonal multipliers on the Heisenberg group. (82k:43008)
- Méivier, Guy Une classe d'opérateurs non hypoelliptiques analytiques. (82a:35029)
- Michelson, M. L. Clifford and spinor cohomology of Kähler manifolds. (82d:53041)
- Nagel, Alexander (with Stein, Elias M.) ★Lectures on pseudodifferential operators: regularity theorems and applications to nonelliptic problems. (82f:47059)
- Nomofilov, V. E. See Bulyrev, V. S., (82m:35043)
- O'Brian, Nigel R. (with Toledo, Domingo; Tong, Yue Lin L.) Grothendieck-Riemann-Roch for complex manifolds. (82m:32011)
- Ramis, Jean-Pierre Une remarque sur les complexes différentiels de fibrés holomorphes. (English summary) (82f:32044)
- Rothschild, Linda Preiss Nonexistence of optimal L^2 estimates for the boundary Laplacian operator on certain weakly pseudoconvex domains. (82f:35060)
- Stein, Elias M. See Nagel, Alexander, (82f:47059)
- Toledo, Domingo See O'Brian, Nigel R.; et al., (82m:32011)
- Tong, Yue Lin L. See O'Brian, Nigel R.; et al., (82m:32011)
- Trèves, François See Baouendi, M. S., (82f:35057)
- Vincent, G. G. Équations de Laplace et matrices de Dirac. (English summary) (82i:35080)

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- Andronikof, Emmanuel Déterminant, selon M. Sato et M. Kashiwara. 82i:58062
- Systèmes déterminés et systèmes normaux d'équations aux dérivées partielles.

- (English summary) [Determined systems and normal systems of partial differential equations] 82i:58066
- Gabber, Ofer The integrability of the characteristic variety. 82j:58104
- Kashiwara, M. Faisceaux constructibles et systèmes holonomes d'équations aux dérivées partielles linéaires à points singuliers réguliers. 82e:58087
- See also Andronikof, Emmanuel, 82i:58062
- Monteiro Fernandes, Teresa Variété 1-microcaractéristique pour les \mathcal{E}_X -modules cohérents. (English summary) 82i:58084
- Noumi, Masatoshi On the equivalence of certain comparison theorems for holonomic systems of differential equations. 82i:58063
- Ōaku, Toshinori A canonical form of a system of microdifferential equations with noninvolutionary characteristics and branching of singularities. 82e:58088
- Pham, Frédéric Déploiements de singularités de systèmes holonomes. (English summary) 82e:58089
- (Sato, Mikio) See Andronikof, Emmanuel, 82i:58062
- Schapira, Pierre Conditions de positivité dans une variété symplectique complexe. Applications à l'étude de l'hypoellipticité analytique. 82d:58062
- Sjöstrand, Johannes Note on a paper of F. Trèves concerning Mizohata type operators. 82i:58085

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- Feldman, G. L. Global dimension of rings of differential operators. (Russian) (82h:16023)
- Helmstetter, Jacques Produits intérieurs de séries formelles et algèbres de Clifford symplectiques. (English summary) [Interior products of formal series and symplectic Clifford algebras] (82j:58055)
- Ishimura, Ryūichi Homomorphismes du faisceau des germes de fonctions holomorphes dans lui-même et opérateurs différentiels. II. (82h:32014)
- Kataoka, Kiyomi Microlocal theory of boundary value problems. II. Theorems on regularity up to the boundary for reflective and diffractive operators. (82m:35152)
- Kim, Jongsik (with Kim, Jung Soo; Shin, Joon Kook) Unsolvability of the Mizohata operator. (82k:35003)
- Kim, Jung Soo See Kim, Jongsik; et al., (82k:35003)
- Kimura, Tatsuo Theory of prehomogeneous vector spaces. (Japanese) (82k:14049)
- Langenbruch, Michael Fortsetzung von Randwerten zu hypoelliptischen Differentialoperatoren und partielle Differentialgleichungen. (82a:35028)
- Llamosi, Albert A method for the calculus of Bernstein's polynomial. (82e:32017)
- Mebkhout, Zoghman Sur le problème de Hilbert-Riemann. (82a:32015)
- Muro, Masakazu On prehomogeneous vector spaces related to binary cubic forms. II. The homology diagrams and the Fourier transforms. (82k:58098)
- Petrov, Vesselin The parametrix of the Cauchy problem for nonsymmetrizable hyperbolic systems with characteristics of constant multiplicity. (Russian) (82d:35060)
- Pham, Frédéric Remarque sur l'équivalence des fonctions de phase. (English summary) (82f:32016)
- Schapira, Pierre Conditions de positivité dans une variété symplectique complexe. Applications à l'étude des microfonctions. (English summary) (82h:32034)
- Sekiguchi, Jirō Eigenspaces of the Laplace-Beltrami operator on a hyperboloid. (82g:22010)
- Shin, Joon Kook See Kim, Jongsik; et al., (82k:35003)

58G10 Index theory and fixed point theorems

- Donnelly, Harold On L^2 -Betti numbers for abelian groups. 82f:58078
- Gangolli, Ramesh (with Warner, Garth) Zeta functions of Selberg's type for some noncompact quotients of symmetric spaces of rank one. 82m:58049
- Katase, Kiyoshi Eta function on S^2 . 82g:58080
- Nestke, Andreas ★Kohomologie elliptischer Komplexe und die Fixpunktformel von Atiyah-Bott. (German) [Cohomology of elliptic complexes and the fixed-point formula of Atiyah-Bott] 82i:58064
- Rempel, Stephan ★Eine analytische Indexformel für elliptische Randwertprobleme für Pseudodifferentialoperatoren. (German) [An analytic index formula for elliptic boundary value problems for pseudodifferential operators] 82e:58090
- Eine analytische Indexformel für elliptische Randwertprobleme für Pseudodifferentialoperatoren. 82f:58047
- Sharma, Bhagirath Lal Atiyah-Singer index theorem. 82g:58081
- Warner, Garth See Gangolli, Ramesh, 82m:58049

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- Boyer, Charles P. Gravitational instantons. (82f:83044)
- Cuntz, Joachim (with Krieger, Wolfgang) A class of C^* -algebras and topological Markov chains. (82f:46073a)
- Din, A. M. (with Zakrzewski, W. J.) Interpretation and further properties of general classical CP^{n-1} solutions. (82f:81042)
- (with Zakrzewski, W. J.) Fermion solutions in the supersymmetric CP^{n-1} model. (82h:81066)
- Elschner, Johannes ★Über entartete Randwertprobleme für elliptische Differentialoperatoren zweiter Ordnung in der Ebene. (German) [On degenerate boundary value problems for second-order elliptic differential operators in the plane] (82h:35041)
- Fateev, V. A. (with Frolov, I. V.; Švarc, A. S.) Quantum fluctuations of instantons in a two-dimensional nonlinear anisotropic sigma-model. (82k:81050)
- Frolov, I. V. See Fateev, V. A.; et al., (82k:81050)
- Frolov, P. A. Topological structure of normally solvable first boundary value problems on the plane. (Russian) (82h:35055)
- Jackiw, R. Invariance, symmetry and periodicity in gauge theories. (See 82i:81001)
- Krieger, Wolfgang See Cuntz, Joachim, (82f:46073a)
- Mühlh, S. G. (with Prösdorf, Siegfried) ★Singuläre Integraloperatoren. (German) [Singular integral operators] (82c:45002)

- Moonen, Boudewijn ★Das Lefschetz-Riemann-Roch-Theorem für singuläre Varietäten. (German) [The Lefschetz-Riemann-Roch theorem for singular varieties] (82b:14015)
- Pecora, Louis M. On the partition function as a functional integral over the eigenspace of an elliptic operator. (82c:83036)
- Picken, R. F. New topological indices in $SO(3)$ Einstein-Yang-Mills theory. (82a:83039)
- Pope, C. N. Eigenfunctions and Spin^c structures in CP^2 . (82a:83040)
- The η invariant for charged spinors in Taub-NUT. (82a:83049)
- Prösdorf, Siegfried See Mihlin, S. G., (82c:45002)
- Römer, H. Atiyah-Singer index theorem and quantum field theory. (82g:81063)
- Rupertsberger, H. W. Relicts of topology: the axial-vector anomaly in four-dimensional QED. (82b:81167)
- Švarc, A. S. See Fateev, V. A.; et al., (82k:81050)
- Zakrzewski, W. J. See Din, A. M., (82b:81066) and (82f:81042)

58G11 Heat and other parabolic equation methods

- Cheeger, Jeff (with Yau, Shing Tung) A lower bound for the heat kernel. 82i:58065
- Yau, Shing Tung See Cheeger, Jeff, 82i:58065

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- Brooks, Robert Exponential growth and the spectrum of the Laplacian. (82j:58109)
- Callias, Constantine (with Taubes, Clifford Henry) Functional determinants in Euclidean Yang-Mills theory. (82d:81074)
- Dlubek, Helga (with Friedrich, Thomas) Spectral properties of the Dirac operator. (Russian summary) (82a:58049)
- Friedrich, Thomas See Dlubek, Helga, (82a:58049)
- Gaveau, Bernard (with Trauber, Philip) Constructions de diffusions et de mesures invariantes par le groupe de jauge sur l'espace des connexions. (82c:81042)
- Hortacsu, M. (with Rothe, K. D.; Schroer, Bert) Zero-energy eigenstates for the Dirac boundary problem. (82c:81081)
- Kikuchi, Norio On the nonlinear parabolic equation of Eells-Sampson and a harmonic mapping with boundary condition. (82i:58025)
- Kimura, Toshie Expansion coefficient of heat kernel of Laplacian operator in Riemann-Cartan space. (82b:83063)
- Rothe, K. D. See Hortacsu, M.; et al., (82c:81081)
- Schroer, Bert See Hortacsu, M.; et al., (82c:81081)
- Shibuya, Yūji The spectrum of Sasakian manifolds. (82b:53063)
- Švarc, A. S. On quantum fluctuations of instantons. (82g:81064)
- Taubes, Clifford Henry See Callias, Constantine, (82d:81074)
- Trauber, Philip See Gaveau, Bernard, (82c:81042)
- Uchiyama, Kōhei Brownian first exit from and sojourn over one-sided moving boundary and application. (82c:60143)
- Wolf, Kurt Bernardo On time-dependent quadratic quantum Hamiltonians. (82f:81033)

58G12 Exotic index theories [See also 46L05, 46L10, 46M20.]

- Antonevič, A. B. Algebras generated by weighted shift operators and pseudodifferential operators with shift. (Russian) 82j:58105
- Connes, Alain (with Skandalis, Georges) Théorème de l'indice pour les feuilletages. (English summary) 82f:58079
- Skandalis, Georges See Connes, Alain, 82f:58079

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- Antonevič, A. B. Invertibility conditions for operators with a convex rationally independent system of shifts. (Russian) (82b:47030)
- Carey, Richard W. (with Pincus, Joel D.) Mean motion, principal functions, and the zeros of Dirichlet series. (82c:47040)
- (with Pincus, Joel D.) Almost commuting pairs of unitary operators and flat currents. (82j:47024)
- (with Pincus, Joel D.) An integrality theorem for subnormal operators. (82j:47029)
- Connes, Alain An analogue of the Thom isomorphism for crossed products of a C^* -algebra by an action of \mathbb{R} . (82j:46084)
- Cuntz, Joachim A class of C^* -algebras and topological Markov chains. II. Reducible chains and the Ext-functor for C^* -algebras. (82f:46073b)
- Deng, Yao Hua The index formula for equations with algebraic operators. (82f:47015)
- Deundjak, V. M. Homotopy properties of the set of Noether elements of a C^* -algebra of multidimensional generalized Toeplitz operators. (Russian) (82i:46104)
- Calculation of homotopy groups of the set of invertible elements of certain C^* -algebras of operators and applications. (Russian) (82b:46088)
- Douglas, Ronald G. ★ C^* -algebra extensions and K -homology. (82c:46082)
- Edwards, David A. (with Hastings, Harold M.) Čech theory: its past, present, and future. (82b:55010)
- Fack, Thierry (with Skandalis, Georges) L'analogue de l'isomorphisme de Thom pour les groupes de Kasparov. (English summary) (82b:46077)
- (with Skandalis, Georges) Connes' analogue of the Thom isomorphism for the Kasparov groups. (82g:46113)
- Fujii, Kazuyuki A representation of real K -groups by means of a Banach algebra. (82b:46061)
- Hastings, Harold M. See Edwards, David A., (82b:55010)
- Kandelaki, T. K. A theorem of stability in K -theory of C^* -algebras. (Russian. Georgian and English summaries) (82b:46073)
- Mišenko, A. S. Banach algebras, pseudodifferential operators and their applications to K -theory. (Russian) (82c:46092)
- (with Solov'ev, Ju. P.) Representations of Banach algebras and formulas of Hirzebruch type. (Russian) (82i:46059)
- Phillips, John (with Raeburn, Iain) Automorphisms of C^* -algebras and second Čech cohomology. (82b:46089)

- Pimsner, M. (with Popa, Sorin; Voiculescu, Dan) Homogeneous C^* -extensions of $C(X) \otimes K(H)$. I. (82c:46093a)
- (with Voiculescu, Dan) Exact sequences for K -groups and Ext-groups of certain cross-product C^* -algebras. (82c:46074)
- (with Popa, Sorin; Voiculescu, Dan) Homogeneous C^* -extensions of $C(X) \otimes K(H)$. II. (82c:46093b)
- Pincus, Joel D. See Carey, Richard W., (82j:47024); (82j:47029) and (82b:47040)
- Popa, Sorin See Pimsner, M.; et al., (82c:46093a) and (82c:46093b)
- Power, S. C. Fredholm Toeplitz operators and slow oscillation. (82b:47032)
- Raeburn, Iain On the Picard group of a continuous trace C^* -algebra. (82b:46090)
- See also Phillips, John, (82b:46089)
- Skandalis, Georges See Fack, Thierry, (82g:46113) and (82b:46077)
- Solov'ev, Ju. P. See Mišenko, A. S., (82c:46059)
- Strömer, Gerhard Instabile Flächen vorgeschriebener mittlerer Krümmung. (82b:53010)
- Truhil'o, R. See Vasilevskii, N. L., (82b:47015)
- Vasilevskii, N. L. (with Truhil'o, R.) On the theory of φ -operators in matrix algebras of operators. (Russian) (82b:47015)
- Voiculescu, Dan See Pimsner, M., (82c:46074); (82c:46093a) and (82c:46093b)

58G15 Pseudodifferential and Fourier integral operators on manifolds

- Alinhac, S. On the reduction of pseudodifferential operators to canonical forms. 82c:58091
- Antonevič, A. B. (with Brenner, V. V.) The symbol of a pseudodifferential operator with locally independent shifts. (Russian. English summary) 82d:58063
- Boutet de Monvel, L. Variétés de contact quantifiées. 82c:58092
- Brenner, V. V. See Antonevič, A. B., 82d:58063
- Chazarain, Jacques Spectre d'un hamiltonien quantique et mécanique classique. 82d:58064
- Crumeyrolle, Albert Classes de Maslov, fibrations spinorielles symplectiques et transformation de Fourier. 82b:58086
- Farris, Mark Egorov's theorem on a manifold with diffractive boundary. 82m:58050
- Girbau, Joan (with Nicolau, Marcel) Pseudodifferential operators on V -manifolds and foliations. I. 82k:58087a
- (with Nicolau, Marcel) Pseudodifferential operators on V -manifolds and foliations. II. 82k:58087b
- Guillemin, Victor (with Sternberg, Shlomo) Some problems in integral geometry and some related problems in microlocal analysis. 82b:58087
- (with Uhlmann, G.) Oscillatory integrals with singular symbols. 82d:58065
- Isakova, E. K. Some generalizations of the method of a stationary phase. (Russian) 82b:58088
- Lascar, Bernard Le noyau de l'équation des ondes sur une variété riemannienne compacte comme intégrale de chemins. 82f:58090
- Leray, Jean Continu et discontinu; ondes et corpuscules. 82m:58051
- Lagrangian analysis and quantum mechanics (mathematical theory connected with asymptotic expansions and the Maslov index). (Russian) 82b:58048
- The meaning of Maslov's asymptotic method: the need of Planck's constant in mathematics. 82m:58052
- Maeda, Yoshiaki See Ōmori, Hideki; et al., 82b:58089
- McOwen, Robert C. Fredholm theory of partial differential equations on complete Riemannian manifolds. 82g:58082
- Morvan, Jean-Marie Classe de Maslov d'une immersion lagrangienne et minimalité. (English summary) 82i:58066
- Nazaikinskii, V. E. (with Ōsmjan, V. G.; Sternin, B. Ju.; Šatalov, V. E.) Fourier integral operators and the canonical operator. (Russian) 82b:58049
- Nicolau, Marcel See Girbau, Joan, 82k:58087
- Ōmori, Hideki (with Maeda, Yoshiaki; Yoshioka, Akira) On regular Fréchet-Lie groups. I. Some differential geometrical expressions of Fourier integral operators on a Riemannian manifold. 82b:58089
- Ōsmjan, V. G. See Nazaikinskii, V. E.; et al., 82b:58049
- Palamodov, V. P. Asymptotic behavior of oscillating integrals with an isolated stationary phase point. (Russian) 82g:58083
- Quinto, Eric Todd Topological restrictions on double fibrations and Radon transforms. 82g:58084
- Šatalov, V. E. See Sternin, B. Ju., 82a:58048; 82f:58081 and 82b:58049
- Schapira, Pierre Conditions de positivité dans une variété symplectique complexe. Application à l'étude des microfonctions. 82i:58067
- Sternberg, Shlomo See Guillemin, Victor, 82b:58087
- Sternin, B. Ju. (with Šatalov, V. E.) Analytic Lagrangian manifolds and Feynman integrals. (Russian) 82f:58081
- (with Šatalov, V. E.) Legendre uniformization of multivalued analytic functions. (Russian) 82a:58048
- See also Nazaikinskii, V. E.; et al., 82b:58049
- Šubin, M. A. The spectrum and its distribution function for a transversally elliptic operator. (Russian) 82b:58050
- Sunada, Toshikazu Spherical means and geodesic chains on a Riemannian manifold. 82b:58088
- Trèves, François ★Introduction to pseudodifferential and Fourier integral operators. Vol. 2. 82i:58068
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- Yoshioka, Akira See Ōmori, Hideki; et al., 82b:58089

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- Beals, Richard L^p and Hölder estimates for pseudodifferential operators: necessary conditions. (82b:47061)
- Berry, M. V. (with Chambers, R. G.; Large, M. D.; Upstill, C.; Walmsley, J. C.) Wavefront dislocations in the Aharonov-Bohm effect and its water wave analogue. (French summary) (82b:81007)
- Quantizing a classically ergodic system: Sinai's billiard and the KKR method. (82j:81012)

- See also Hannay, J. H., (82g:81005)
- Bjorken, James D. (with Orbach, Harry S.) WKB approximation for general matrix Hamiltonians. (82b:81017)
- Bulla, W. Weyloperatoren für quantisierte Systeme mit nichtkommutativem klassischem Phasenraum. (English summary) (82b:58017)
- Cant, R. J. (with Davis, A. C.) CP^{N-1} models beyond the leading order. (82c:81077)
- Chambers, R. G. See Berry, M. V.; et al., (82b:81007)
- Charbonnel, Anne-Marie Spectre conjoint d'opérateurs pseudodifférentiels qui commutent. (English summary) [Joint spectrum of commuting pseudodifferential operators] (82m:47035)
- Connor, J. N. L. Uniform semiclassical evaluation of Franck-Condon factors and inelastic atom-atom scattering amplitudes. (82j:81055)
- Crowley, B. J. B. On the global nature of the semiclassical wavefunction describing elastic scattering in several coordinate dimensions. (82i:81037)
- Crumeyrolle, Albert Indice d'inertie trilatère et classes de Chern. (82j:53064)
- Danilov, V. G. (with Maslov, V. P.) Bicharacteristics of difference schemes. (82g:65048)
- Davis, A. C. See Cant, R. J., (82b:81077)
- Dedene, Guido Oscillators and complex Hamiltonian calculus. (82j:81015)
- Dedik, P. E. (with Šubin, M. A.) Random pseudodifferential operators and stabilization of the solutions of parabolic equations with random coefficients. (Russian) (82f:35190)
- Dobrohotov, S. Ju. (with Maslov, V. P.) The problem of reflection off the boundary for the equation and finite-zone conditionally periodic solutions. (Russian) (82a:35014)
- (with Maslov, V. P.) Finite-zone almost periodic solutions in WKB-approximations. (Russian) (82i:58035)
- (with Maslov, V. P.) Finite gap almost periodic solutions in asymptotical expansions. (82i:58043)
- Duistermaat, J. J. On operators of trace class in $L^2(X, \mu)$. (82b:47040)
- On global action-angle coordinates. (82d:58029)
- Fleming, G. N. See Gorman, Arthur; et al., (82i:58018)
- Fujiwara, Daisuke An approximate positive part of essentially selfadjoint pseudodifferential operators. I. (82b:47048a)
- An approximate positive part of essentially selfadjoint pseudodifferential operators. II. (82b:47048b)
- (Gamkrelidze, R. V.) See Current problems in mathematics. (82d:47025)
- Gorman, Arthur (with Wells, Robert) A sharpening of Maslov's method for finding asymptotic solutions. (82b:81036)
- (with Wells, Robert; Fleming, G. N.) Wave propagation and Thom's theorem. (82i:58018)
- Hanges, Nicholas Parametrics and propagation of singularities for operators with noninvolutive characteristics. (82c:35084)
- Hannay, J. H. (with Berry, M. V.) Quantization of linear maps on a torus-Fresnel diffraction by a periodic grating. (82g:81005)
- Heller, Eric J. Frozen Gaussians: a very simple semiclassical approximation. (82j:81032)
- Hutchinson, John S. (with Wyatt, Robert E.) Quantum ergodicity for time-dependent wave-packet dynamics. (82f:81020)
- Imai, Masato On a parametrix for a weakly hyperbolic operator. (82b:35094)
- Jona-Lasinio, G. (with Marthelli, F.; Scoppola, E.) New approach to the semiclassical limit of quantum mechanics. I. Multiple tunnelings in one dimension. (82k:81013)
- Karasev, M. V. Asymptotic spectrum and oscillation front for operators with nonlinear commutation relations. (Russian) (82b:47028)
- Kates, Ronald E. Underlying structure of singular perturbations on manifolds. (82c:34064)
- Kawashima, Toshio Some remarks on Lagrangian imbeddings. (82c:53081)
- de Kertanguy, A. (with Percival, Ian C.; Richards, Derek) Classical theory of the static Stark effect for weak fields. (82c:81161)
- Kitada, Hironori Correction to "Asymptotic behavior of some oscillatory integrals" [J. Math. Soc. Japan 31 (1979), no. 1, 127-140; MR 80m:35061]. (82f:35149)
- Kovačev, V. Hr. Construction of a parametrix for a hyperbolic system with characteristics of variable multiplicity. (82m:35148)
- Langouche, F. (with Roekaerts, D.; Tirapegui, Enrique) WKB expansions with higher order corrections: the general case. (82c:81031)
- (with Roekaerts, D.; Tirapegui, Enrique) Covariant WKB expansion in Riemannian space. (82c:81043)
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- Large, M. D. See Berry, M. V.; et al., (82b:81007)
- Lascar, Bernard Problèmes de Cauchy hyperboliques en dimension infinie. (82f:35182)
- Laubin, P. Wave front set analytique d'une intégrale oscillante. (English summary) (82b:35154)
- (with Lousberg, P.) Sur le wave front set au bord d'une distribution à trace. (English summary) [On the wave front set at the boundary of a distribution of trace class] (82m:35149)
- Levandoski, S. Z. General calculus of pseudodifferential operators and asymptotic properties of the spectrum. (Russian) (82b:47050)
- Liskovec, O. A. On the Maslov-Morozov property in the regularization method for nonlinear equations of the first kind. (Russian) (82c:47096)
- Lousberg, P. Singularités dans les problèmes aux limites pour le système de Maxwell. (English summary) [Singularities in boundary value problems for the Maxwell system] (82m:35131)
- See also Laubin, P., (82m:35149)
- Magneron, Bernard Opérateurs d'entrelacement des représentations unitaires irréductibles des groupes de Lie nilpotents et indice de Maslov. (English summary) (82f:22008)
- Malgrange, Bernard Méthode de la phase stationnaire et sommation de Borel. (82a:41028)
- Mansour, H. M. M. (with Müller-Kirsten, H. J. W.) Matching of WKB solutions to other solutions. (82b:81037)
- Martinelli, F. See Jona-Lasinio, G.; et al., (82k:81013)
- Maslov, V. P. (with Omel'janov, G. A.) Asymptotic soliton-like solutions of equations with small dispersion. (Russian) (82i:35021)
- See also Dobrohotov, S. Ju., (82a:35014); Danilov, V. G., (82g:65048); Dobrohotov, S. Ju., (82i:58035) and (82k:58043)
- Mauceri, Giancarlo The Weyl transform and bounded operators on $L^p(\mathbb{R}^n)$. (82i:44002)
- Menikoff, A. (with Sjöstrand, Johannes) On the eigenvalues of a class of hypoelliptic operators. II. (82m:35114)
- (with Sjöstrand, Johannes) The eigenvalues of hypoelliptic operators. III. The nonsemibounded case. (82m:35115)
- Mišenko, A. S. Banach algebras, pseudodifferential operators and their applications to K -theory. (Russian) (82c:46092)
- Mizrahi, Maurice M. On the WKB approximation to the propagator for arbitrary Hamiltonians. (82b:58037)
- Müller-Kirsten, H. J. W. See Mansour, H. M. M., (82b:81037)
- Neveu, A. Semiclassical approximations in field theory. (82m:81064)
- Nishimoto, Toshiko Uniform asymptotic properties of the WKB method. (82m:34058)
- Popivanov, Pet' R. Analytic hypoellipticity of a system of microdifferential equations with noninvolutive characteristics. (82m:35026)
- Omel'janov, G. A. See Maslov, V. P., (82i:35021)
- Orbach, Harry S. See Bjorken, James D., (82b:81017)
- Percival, Ian C. See de Kertanguy, A.; et al., (82c:81161)
- Popivanov, Pet' R. (with Popov, Georgi St.) A priori estimates and some microlocal properties of a class of pseudodifferential operators. (82f:35193)
- Popov, Georgi St. See Popivanov, Pet' R., (82f:35193)
- Power, S. C. Commutator ideals and pseudodifferential C^* -algebras. (82c:47033)
- Qi, Min You On a class of linear partial differential equations with critical points in the Hamiltonian field. (Chinese) (82b:35035)
- Richard, J. L. (with Rouet, A.) Complex saddle points versus dilute-gas approximation in the double-well anharmonic oscillator. (82b:81038)
- Richards, Derek See de Kertanguy, A.; et al., (82c:81161)
- Roekaerts, D. See Langouche, F.; et al., (82c:81031); (82c:81043) and (82g:81024)
- Rouet, A. See Richard, J. L., (82b:81038)
- Satalov, V. E. See Sternin, B. Ju., (82b:58091) and (82k:78010)
- Scoppola, E. See Jona-Lasinio, G.; et al., (82k:81013)
- Sjöstrand, Johannes On the eigenvalues of a class of hypoelliptic operators. IV. (French summary) (82m:35116)
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- Dedik, P. E. (with Šubin, M. A.) Elliptic operators in spaces of homogeneous random fields and the stabilization of solutions to parabolic equations with random coefficients. (Russian) **(82h:60123)**
- Dekker, H. On the most probable transition path of a general diffusion process. **(82h:60008)**
- Duncan, Tyrone E. On the steady state filtering problem for linear pure delay time systems. **(82c:93066)**
- Elworthy, K. David (with Truman, Aubrey) The classical limit of quantum mechanics in a curved space background. **(82h:81043)**
- Gagnon, R. See Ali, S. Twareque; et al., **(82i:81039)**
- Gallardo, Leonard Processus subordonnés au mouvement brownien sur les groupes de Lie nilpotents. (English summary) **(82c:60140)**
- Gaveau, Bernard (with Trauber, Philip) Mesures et représentations non locales pour les groupes de Lie d'applications. (English summary) **(82m:22017)**
- Hoegh-Krohn, Raphael See Combe, Ph.; et al., **(82c:81040)**
- Hunt, Katharine L. C. (with Ross, John) Path integral solutions of stochastic equations for nonlinear irreversible processes: the uniqueness of the thermodynamic Lagrangian. **(82f:82028)**
- Ichihara, Kanji (with Watanabe, Hisao) Double points for diffusion processes. **(82g:60102)**
- Jensen, Roderick V. Functional integral approach to classical statistical dynamics. **(82j:82010)**
- Johnstone, Iain ★A probabilistic study of linear elliptic-parabolic equations of second order. **(82i:60114)**
- Krener, Arthur J. (with Lobry, Claude) The complexity of stochastic differential equations. **(82j:60107)**
- Kunita, Hiroshi On the representation of solutions of stochastic differential equations. **(82c:58028)**
- Some extensions of Itô's formula. **(82c:60131)**
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- Lobry, Claude See Krener, Arthur J., **(82j:60107)**
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- Régularité des lois conditionnelles en théorie du filtrage non-linéaire et calcul des variations stochastique. **(82f:60090)**
- See also Bismut, Jean-Michel, **(82f:60170)**
- Mikulevičius, R. On the existence and uniqueness of the solutions of the martingale problem on a manifold with boundary. (Russian. Lithuanian and English summaries) **(82k:60105)**
- Molčanov, S. A. The local structure of the spectrum of the one-dimensional Schrödinger operator. **(82d:35076)**
- Ogura, Yukio A remark on a branching Brownian motion on a Riemannian manifold with negative curvature. **(82d:60157)**
- See also Yamada, Toshio, **(82f:60142)**
- Ōkura, Hiroyuki An asymptotic property of a certain Brownian motion expectation for large time. **(82j:60155)**
- Pinsky, Mark A. Three problems in stochastic Riemannian geometry. **(82m:60093)**
- Prugovečki, Eduard See Ali, S. Twareque; et al., **(82i:81039)**
- Rodriguez, R. See Combe, Ph.; et al., **(82c:81040)**
- Ross, John See Hunt, Katharine L. C., **(82f:82028)**
- Roynette, B. See Clerc, Jean-Louis, **(82i:58072)**
- Schwartz, Laurent ★Semi-martingales sur des variétés, et martingales conformes sur des variétés analytiques complexes. (French) [Semimartingales on manifolds, and conformal martingales on complex analytic manifolds] **(82m:60051)**
- Sethi, Suresh P. (with Lehoczy, John P.) A comparison of the Itô and Stratonovich formulations of problems in finance. **(82c:90028)**
- Sirugue, M. See Combe, Ph.; et al., **(82c:81040)**
- Sirugue-Collin, M. See Combe, Ph.; et al., **(82c:81040)**
- Stroock, Daniel W. The Malliavin calculus and its applications. **(82k:60092)**
- Šubin, M. A. See Dedik, P. E., **(82h:60123)**
- Sunada, Toshiyazu Spherical means and geodesic chains on a Riemannian manifold. **(82k:58088)**
- Trauber, Philip See Gaveau, Bernard, **(82m:22017)**
- Truman, Aubrey See Elworthy, David, **(82h:81043)**
- Tsuchiya, Masaaki Parametrix of diffusion equations with boundary conditions. **(82g:35046)**
- Uchiyama, Kōhei Brownian first exit from and sojourn over one-sided moving boundary and application. **(82c:60143)**
- Vauthier, Jacques Finitude d'espaces d'états liés pour certains systèmes quantiques. **(82f:35151)**
- Watanabe, Hisao See Ichihara, Kanji, **(82g:60102)**
- Yamada, Toshio (with Ogura, Yukio) On the strong comparison theorems for solutions of stochastic differential equations. **(82f:60142)**
- Yamato, Yūiti Stochastic differential equations and nilpotent Lie algebras. **(82f:60143)**
- Differential equations ★Stochastic differential equations on manifolds. (Japanese) **(82a:60006)**
- Stochastic differential equations on manifolds ★Stochastic differential equations on manifolds. (Japanese) **(82a:60006)**
- Symposium: Stochastic Differential Equations on Manifolds ★Stochastic differential equations on manifolds. (Japanese) **(82a:60006)**
- 58G35 Invariance properties
- Bryan, A. C. (with Haines, C. R.; Stuart, Allan E. G.) A classification of the separable solutions of the two-dimensional sine-Gordon equation and of its Laplacian variant. (Italian and Russian summaries) **82a:58054**
- Cahen, Michel (with Gutt, Simone) Maxwell's equations in Segal's model: solutions and their invariance. **82i:58076a**
- (with Gutt, Simone) Erratum: "Maxwell's equations in Segal's model: solutions and their invariance". **82i:58076b**
- Duflo, Michel Opérateurs différentiels invariants sur un espace symétrique. (English summary) **82c:58104**
- Fuščik, V. I. A new method of investigating the group properties of systems of partial differential equations. (Russian. English summary) **82f:58086**
- (with Nakonečnii, V. V.) Algebra-theoretic analysis of the Lamé equation. (Russian) **82h:58056**
- Gutt, Simone See Cahen, Michel, **82i:58076**
- Haines, C. R. See Bryan, A. C.; et al., **82a:58054**
- Höppner, Wolfgang ★Über gruppeninvariante Randwertprobleme. (German) [On group invariant boundary value problems] **82g:58096**
- Ibragimov, N. H. (with Sabat, A. B.) Evolution equations with a nontrivial Lie-Bäcklund group. (Russian) **82f:58087**
- Kosmann-Schwarzbach, Yvette Generalized symmetries of partial differential equations. (See **82h:81004**)
- Nakonečnii, V. V. See Fuščik, V. I., **82h:58056**
- Olver, Peter J. Symmetry groups and group invariant solutions of partial differential equations. **82c:58104**
- Pirani, Felix A. E. (with Robinson, David Clyde; Shadwick, William F.) ★Local jet bundle formulation of Bäcklund transformations. **82g:58097**
- Robinson, David Clyde See Pirani, Felix A. E.; et al., **82g:58097**
- Sabat, A. B. See Ibragimov, N. H., **82f:58087**
- Shadwick, William F. See Pirani, Felix A. E.; et al., **82g:58097**
- Stuart, Allan E. G. See Bryan, A. C.; et al., **82a:58054**
- Vorob'ev, E. M. Reduction of differential equations with symmetries. (Russian) **82d:58066**
- Zil'beršteĭn, L. V. G-similar solutions of second-order nonlinear differential equations. (Russian) **82j:58113**
- secondary classifications:
- Alëšina, S. A. See Musalimov, V. M., **(82h:73026)**
- Dadok, Jiri Solvability of invariant differential operators of principal type on certain Lie groups and symmetric spaces. **(82h:43014)**
- Erig, W. See Steeb, W.-H.; et al., **(82h:81024)**
- Ibragimov, N. H. (with Sabat, A. B.) Infinite Lie-Bäcklund algebras. (Russian) **(82h:58007)**
- Ismagilov, R. G. Quasiclassical expansion in the neighborhood of a meron solution in a nonlinear σ -model. (Russian. English summary) **(82f:81046)**
- Koornwinder, Tom H. ★Invariant differential operators on nonreductive homogeneous spaces. **(82g:43011)**
- Langouche, F. (with Roekaerts, D.; Tirapegui, Enrique) Covariant and gauge-invariant calculation of higher-order corrections in WKB expansions on Riemannian manifolds. **(82g:81024)**
- Manakov, S. V. (with Zaharov, V. E.) Three-dimensional model of relativistic-invariant field theory, integrable by the inverse scattering transform. **(82j:81054)**
- Miller, Willard, Jr. (with Patera, J.; Winternitz, P.) Subgroups of Lie groups and separation of variables. **(82h:81055)**
- Mimura, Fumitake (with Nōno, Takayuki) Generalized contact transformations. **(82c:35010)**
- Musalimov, V. M. (with Alëšina, S. A.) Group analysis of a plane model of an elastic medium. (Russian) **(82h:73026)**
- Nōno, Takayuki See Mimura, Fumitake, **(82c:35010)**
- Patera, J. See Miller, Willard, Jr.; et al., **(82h:81055)**
- Pfister, Charles Edouard On the symmetry of the Gibbs states in two-dimensional lattice systems. **(82h:82007)**
- Roekaerts, D. See Langouche, F.; et al., **(82g:81024)**
- Sabat, A. B. See Ibragimov, N. H., **(82f:58087)**
- Sattinger, D. H. ★Les symétries des équations et leurs applications dans la mécanique et la physique. (French) [The symmetries of equations and their applications in mechanics and physics] **(82i:58001)**
- Steeb, W.-H. (with Erig, W.; Strampp, W.) Symmetries and the Dirac equation. **(82h:81024)**
- Strampp, W. Invariant group solutions of hydrodynamical equations. **(82c:35011)**
- See also Steeb, W.-H.; et al., **(82h:81024)**

- Tirapegui, Enrique See Langouche, F.; et al., (82g:81024)
 Ueno, Kazuhide A remark on the automorphism pseudogroup of a differential equation of immersion type. (82c:58107)
 Winternitz, P. See Müller, Willard, Jr.; et al., (82h:81055)
 Xu, Bo Wei The maximal kinematical group of the general Schrödinger equation. (82j:81019)
 Zaharov, V. E. See Manakov, S. V., (82j:81054)

58G40 Applications

- Choquet-Bruhat, Yvonne (with Christodoulou, Demetrios) Elliptic systems in $H_{\infty, \delta}$ spaces on manifolds which are Euclidean at infinity. (82c:58060)
 Christodoulou, Demetrios See Choquet-Bruhat, Yvonne, 82c:58060

secondary classifications:

- Bullough, Robin K. Solitons: inverse scattering theory and its applications. (82m:35124)
 Castagnino, Mario On the second quantization of scalar fields in curved space-time. (82d:83041)
 Clark, T. E. (with Menikoff, Ralph; Sharp, David H.) Quantum mechanics on the half-line using path integrals. (82h:81032)
 Cosgrove, Christopher M. Relationships between the group-theoretic and soliton-theoretic techniques for generating stationary axisymmetric gravitational solutions. (82m:83012)
 Epstein, Marcelo (with Segev, Reuven) Differentiable manifolds and the principle of virtual work in continuum mechanics. (82d:73008)
 Kuratsuji, Hiroshi (with Mizobuchi, Yutaka) Semiclassical quantization of a spin system by coherent state path integrals. (82f:81026)
 Lindenberg, Katja (with Seshadri, Venkata) Dissipative contributions of internal multiplicative noise. I. Mechanical oscillator. (82k:82025)
 Meirmanov, A. M. (with Puhnačev, V. V.) Lagrangian coordinates in the Stefan problem. (Russian) (82m:35089)
 Menikoff, Ralph See Clark, T. E.; et al., (82h:81032)
 Mizobuchi, Yutaka See Kuratsuji, Hiroshi, (82f:81026)
 Puhnačev, V. V. See Meirmanov, A. M., (82m:35089)
 Renardy, Michael On bounded solutions of a classical Yang-Mills equation. (82e:81033)
 Segev, Reuven See Epstein, Marcelo, (82d:73008)
 Seshadri, Venkata See Lindenberg, Katja, (82k:82025)
 Sharp, David H. See Clark, T. E.; et al., (82h:81032)
 Strominger, Andrew Inverse-dimensional expansion in quantum gravity. (82m:83021)
 Toms, David J. Interacting twisted and untwisted scalar fields in a nonsimply connected space-time. (82d:81113)

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- Chang, Weita Global solvability of the Laplacians on pseudo-Riemannian symmetric spaces. (82b:58105)
 Eguchi, Masaaki (with Kumahara, Keisaku) Fourier transforms and elementary solutions of invariant differential operators on homogeneous vector bundles over compact homogeneous spaces. (82j:58114)
 Kaup, D. J. The Estabrook-Wahlquist method with examples of application. (82c:58061)
 Kumahara, Keisaku See Eguchi, Masaaki, 82j:58114
 Lévy-Bruhl, Pierre Résolubilité locale et globale d'opérateurs invariants du second ordre sur des groupes de Lie nilpotents. (English summary) (82d:58067)
 Sibner, L. M. (with Sibner, R. J.) A sub-elliptic estimate for a class of invariantly defined elliptic systems. (82j:58115)
 Sibner, R. J. See Sibner, L. M., 82j:58115

secondary classifications:

- Asada, Kenji See Fujiwara, Daisuke, (82m:81029)
 Bardakci, Korkut (with Caldi, D. G.; Neuberger, H.) Dominant Euclidean configurations for all N . (82h:81080)
 Caldi, D. G. See Bardakci, Korkut; et al., (82h:81080)
 Damakhi, M. (with Helffer, Bernard) Analyticité et itères d'un système de champs non elliptique. (82j:35039)
 Fujiwara, Daisuke (with Asada, Kenji) Structure of fundamental solutions of the Schrödinger equation. Convergence of Feynman's path integrals. (Japanese) (82m:81029)
 Grozman, P. Ja. Classification of bilinear invariant operators on tensor fields. (Russian) (82h:58008)
 Helffer, Bernard See Damakhi, M., (82j:35039)
 Israel, Werner See Zannias, T., (82j:83033)
 Neuberger, H. See Bardakci, Korkut; et al., (82h:81080)
 Pommaret, Jean-François Systèmes automorphes d'équations aux dérivées partielles. (English summary) (82c:58106)
 Rizov, V. A. A Lie group framework for soliton equations. (See 82i:81004b)
 Saks, R. S. Boundary value problems for weakly elliptic systems of differential equations. (Russian) (82h:58001)
 Sumitomo, Takeshi See Tandai, Kwoichi, (82f:53062)
 Tandai, Kwoichi (with Sumitomo, Takeshi) Killing tensor fields of degree 2 and spectrum of $SO(n+1)/SO(n-1) \times SO(2)$. (82f:53062)
 Zannias, T. (with Israel, Werner) Local thermodynamics and stress tensor of the Hawking radiation. (82j:83033)

58Hxx Pseudogroups and general structures on manifolds

58H05 Pseudogroups [See also 22E65.]

- Abib, Odinete Renée Normalisateur des algèbres de Lie formelles. (82g:58098)
 Kiso, Kazuhiro Local properties of intransitive infinite Lie algebra sheaves. (82g:58099)

- Kockinos, Constantin-Neophytos Construction of the Élie Cartan fundamental form. I. General theory. (82j:58116a)
 Construction of the Élie Cartan fundamental form. II. The É. Cartan fundamental form of a pseudogroup. (82j:58116b)
 Molino, P. Le problème d'équivalence pour les pseudogroupes de Lie: méthodes intrinsèques. (English summary) (82h:58057)
 Petitjean, Alexis Homomorphismes de distributions formelles. (82e:58105)
 Pommaret, Jean-François Systèmes automorphes d'équations aux dérivées partielles. (English summary) (82c:58106)
 Ueno, Kazuhide A remark on the automorphism pseudogroup of a differential equation of immersion type. (82c:58107)
 secondary classifications:

- Conn, Jack F. ★Nonabelian minimal closed ideals of transitive Lie algebras. (82i:58077)
 Grisko, P. Ja. On a problem of conjugate Cartan equivalence. (Russian) (82h:53048)
 Gunning, R. C. ★On uniformization of complex manifolds: the role of connections. (82c:32034)
 Libermann, Paulette Introduction à l'étude de certains systèmes différentiels. (82a:58004)
 Morimoto, Tokuji Sur le problème d'équivalence des structures géométriques. (English summary) (82h:53037)
 Pommaret, Jean-François Differential Galois theory. (82c:35004)
 Seda, Anthony Karel On measures in fibre spaces. (82m:43002)
 Takens, Floris Characterization of a differentiable structure by its group of diffeomorphisms. (82c:58107)

58H10 Cohomology of classifying spaces for pseudogroup structures (Spencer, Gel'fand-Fuks, etc.)

- Conn, Jack F. ★Nonabelian minimal closed ideals of transitive Lie algebras. (82i:58077)
 Shibata, Katsuyuki Remarque sur la cohomologie de l'algèbre de Lie des champs de vecteurs sur la sphère. (English summary) (82f:58088)
 secondary classifications:

- Bočarov, A. V. The Spencer cohomology of affine algebraic varieties. (Russian) (82g:14025)
 Crumeyrolle, Albert Classes caractéristiques principales et secondaires. (82h:57015)
 Pommaret, Jean-François Théorie de Galois différentielle. (English summary) (82f:12031)
 Sasaki, Ryu Canonical structure of Bäcklund transformations. (82i:35159)

58H15 Deformations of structures [See also 32Gxx, 58G05.]

- Abib, Odinete Renée Équations de Lie et fibrations. (82a:58055)
 Fuchssteiner, Benno The Lie algebra structure of nonlinear evolution equations admitting infinite-dimensional abelian symmetry groups. (82f:58089)
 Ibragimov, N. H. See Žiber, A. V.; et al., 82h:58058
 Kanie, Yukihiro Some Lie algebras of vector fields and their derivations. Case of partially classical type. (82m:58058)
 Kupersmidt, Boris On the nature of the Gardner transformation. (82f:58090)
 Lyčagin, V. V. On singularities of the solutions of differential equations. (Russian) (82a:58056)
 Pommaret, Jean-François Cohomologie intrinsèque des algèbres de Lie tronquées. (English summary) (82g:58100)
 Šabat, A. B. See Žiber, A. V.; et al., 82h:58058
 Talyšev, A. A. The method of differential constraints and invariant solutions of strictly hyperbolic systems with two independent variables. (Russian) (82m:58059)
 Žiber, A. V. (with Ibragimov, N. H.; Šabat, A. B.) Liouville-type equations. (Russian) (82h:58058)
 Complete description of the Lie-Bäcklund algebra for equations of generation of the second harmonic. (Russian) (82m:58060)

secondary classifications:

- Feigin, B. L. (with Fuks, D. B.) Homology of the Lie algebra of vector fields on the line. (Russian) (82b:17017)
 Fokas, A. S. (with Fuchssteiner, Benno) Bäcklund transformations for hereditary symmetries. (82k:58006)
 Fuchssteiner, Benno See Fokas, A. S., (82k:58006)
 Fuks, D. B. See Feigin, B. L., (82b:17017)
 Lecomte, Pierre B. A. Sur l'algèbre de Lie des sections d'un fibre en algèbres de Lie. (82h:57021)
 Lichnerowicz, André Deformations and quantization. (82c:58022)
 Pommaret, Jean-François Théorie de Galois des systèmes dynamiques. (English summary) (82g:12028)
 Algèbre différentielle formelle. (English summary) (82i:12027)
 Steudel, H. A relation connecting scale transformation, Galilean transformation and Bäcklund transformation for the nonlinear Schrödinger equation. (82h:35008)
 Vanžura, J. On the geometry and topology of manifolds over algebras. (82h:53039)
 Vasil'ev, A. M. Differential algebra. Contravariant analytical methods in differential geometry. (Russian) (82f:58005)

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- Kosmann-Schwarzbach, Yvette Generalized symmetries of nonlinear partial differential equations. (82g:58101)
 secondary classifications:
 Antonovskii, L. K. Complex representation of solutions of a problem with free boundary for the Stokes system. (Russian) (82m:35123)
 Grabowski, Janusz Derivations of the Lie algebras of analytic vector fields. (82i:32041)



